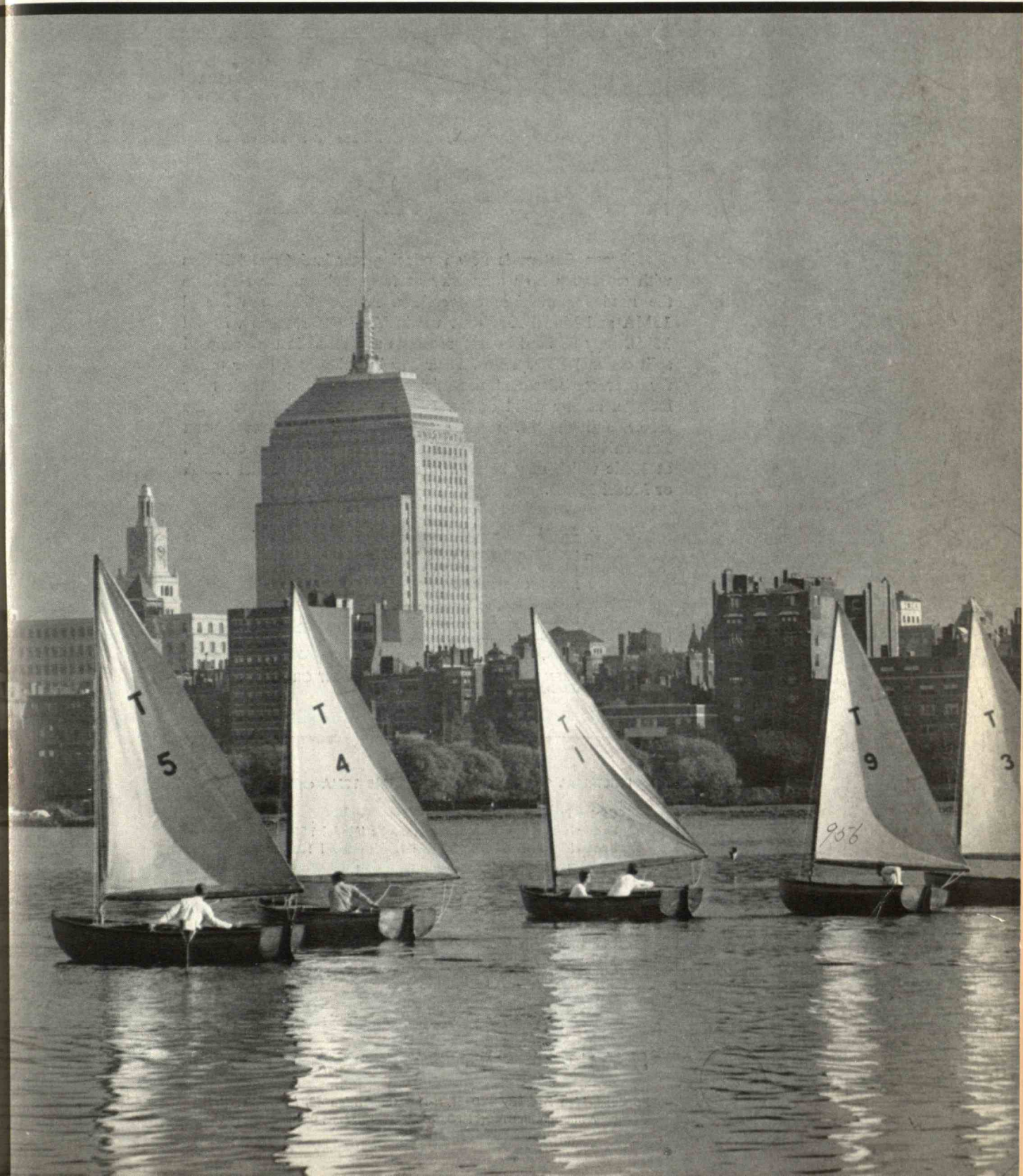


TECHNOLOGY

REVIEW

November 1956



technology review

Published by MIT

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HYCON EASTERN



Shown 1/2 size
Crystal Filter Model 13MA
patent pending

CRYSTAL FILTERS

Hycon Eastern is now producing standard Crystal Filters with extremely high selectivity at frequencies which eliminate the need for multiple conversions. Among these are Model 13MA and Model 13MB for use in VHF FM receivers. Model 13MB may be used in AM receivers as well as in the proposed split channel FM systems. Their low insertion loss, linear transfer characteristics and non-microphonic qualities permit their location at any point of low signal level such as between the mixer and the i.f. amplifier. For FM applications Hycon Eastern has available standard Crystal Discriminators centered at 13Mc which may be used in conjunction with Model 13MA or Model 13MB.

SMALL SIZE — ONLY 3 1/8" X 1" X 1 1/2"

- **FREQUENCY SHIFT LESS THAN $\pm .005\%$ TOTAL FROM -55° C. TO $+85^{\circ}$ C.**
- **NON-MICROPHONIC**
- **UNAFFECTED BY IMPEDANCE VARIATIONS COMMONLY ENCOUNTERED IN TRANSISTOR CIRCUITS**
- **WORKS DIRECTLY TUBE-TO-TUBE OR TRANSISTOR-TO-TRANSISTOR WITH NO PADDING**
- **HERMETICALLY SEALED, NO ALIGNMENT OR READJUSTMENT NECESSARY**

ELECTRICAL SPECIFICATIONS — MODELS 13MA and 13MB

Center Frequency: 13Mc

Bandwidth at 6 db Attenuation: 30 Kc (Model 13MA)

Bandwidth at 6 db Attenuation: 15 Kc (Model 13MB)

Shape Factor: $\frac{60 \text{ db Bandwidth}}{6 \text{ db Bandwidth}} = \frac{1.8}{1}$

Power Insertion Loss: 6 db Maximum

Passband Response Variation: ± 1 db Maximum

Ultimate Attenuation: 80 db Minimum

Write for Crystal Filter Bulletin



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Foamflex Coaxial Cable

**with outstanding properties for
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This new low-loss, radiation-free cable is particularly adapted to use in community antenna systems, signal circuits and aviation communications, including both airborne and ground installations.

Foamflex coaxial cable has a number of outstanding advantages. These include

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★ ★ ★

Foamflex is available in 50 ohm and 70 ohm impedances. When intended for underground duct or direct burial installations and submarine applications, a Habirlene (polyethylene) jacket is supplied for corrosion protection.

**A special bulletin describing Foamflex coaxial cable
will be supplied upon request. Write Dept. HF1.**



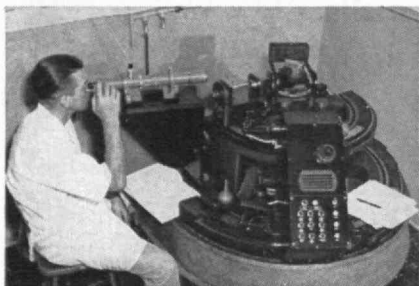
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NORTHROP'S NEW GEAR GENERATOR

First of its kind for
Hobbing Precision Gears

(HAWTHORNE, CALIF.) Stone Age and Missile Age meet in a new and revolutionary type of gear generator now in use at Northrop Aircraft's Snark SM-62 missile machine shop at Hawthorne. Pre-historic granite, polished to optical

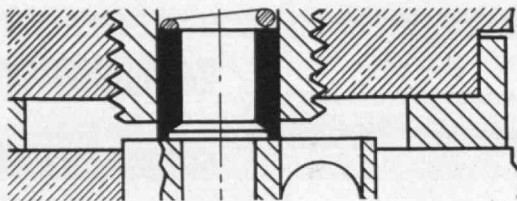


accuracy, provides the foundation that makes this unique Northrop-built generator virtually vibrationless. It is declared by Northrop missile engineers to have the most accurate indexing machine system of any machine in the United States.

An upper and lower carriage permits a two-way optical check of the indexing system which is first located manually and then adjusted through the optical system to an accuracy of one-tenth of a second of arc (4.8 millionths per inch). Possibility for error is reduced to a minimum by a warning from a loud buzzer if the machine is out of sequence when the operator presses a button to start the hob.

This new device is but one of many that illustrate the advanced thinking that never ceases at Northrop. In keeping with this look-ahead spirit, Northrop's new multi-million-dollar engineering and science center, now nearing completion, will offer every facility to young engineers who will find here the aircraft industry's finest scientific installations.

At Northrop, quality of personnel ranks equally with quality of equipment. There, an engineer finds himself moving quickly ahead on fresh assignments that inspire his enthusiasm as well as challenge his ability. His initiative and ideas are respected, encouraged and rewarded.



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Continually expanding programs at Northrop Aircraft are creating new opportunities for mechanical engineers in the following areas: launching and landing gear design, hydraulics and pneumatics, control systems, and equipment.

You'll enjoy the fine spirit of cooperation at Northrop. The new multi-million-dollar engineering and science center, now nearing completion, will be a great place to work in, both as to its modern architectural design and newest scientific installations. You'll be associated with a top engineering team on such notable projects as Northrop's new supersonic trainer airplane, Snark SM-62 intercontinental missile, and other advanced aircraft and missile programs.

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At Northrop, the progress of personnel is important. Initiative and ability are recognized and encouraged, and full opportunity is given to present and discuss ideas.

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Shown $\frac{1}{2}$ size

In the Convair F-102A Rate Gyro System, Doelcam JR Rate Gyros instantaneously detect aircraft turning rates. Resulting output signals stabilize the aircraft throughout its entire range of speed and altitude. Teamed with other equipment, this Rate Gyro System makes possible uniform pilot control response for all flight conditions. Model JR Rate Gyros are also designed into a number of production and development missile programs. Doelcam products and engineering experience are available to assist in the solution of your Gyro system problems. *Write for Bulletin JR-1.*

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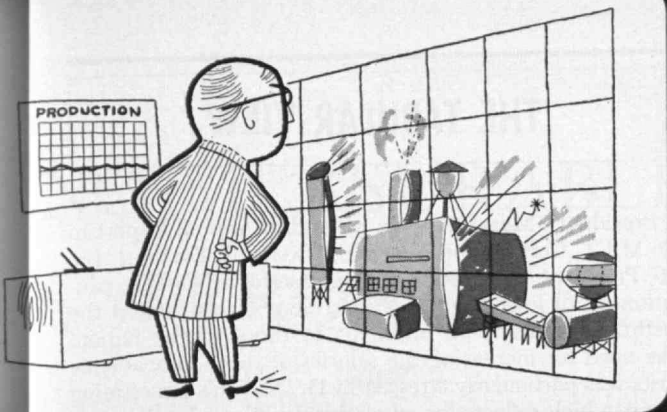
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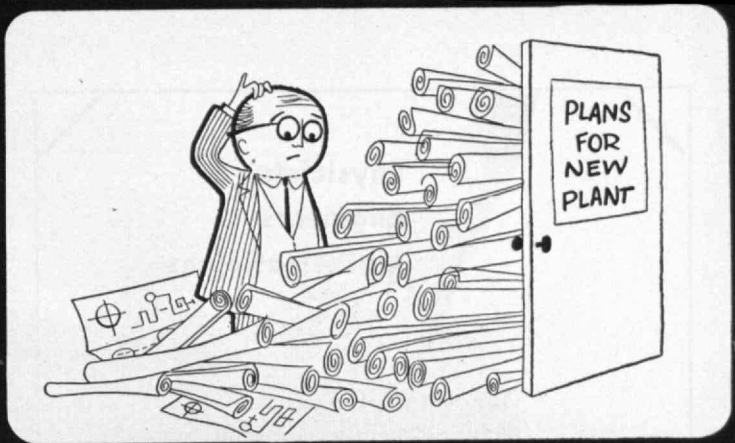
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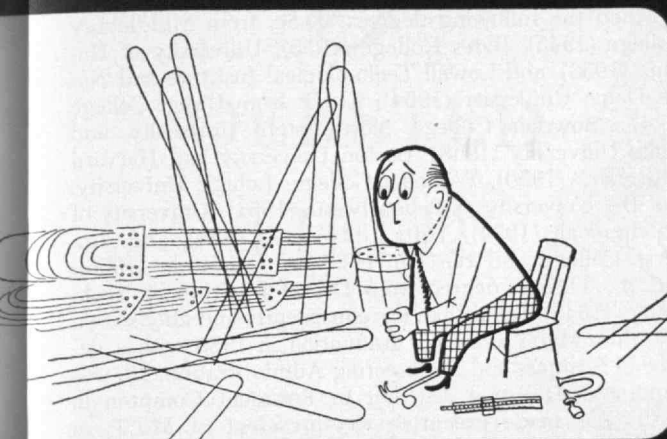
Springfield, Massachusetts



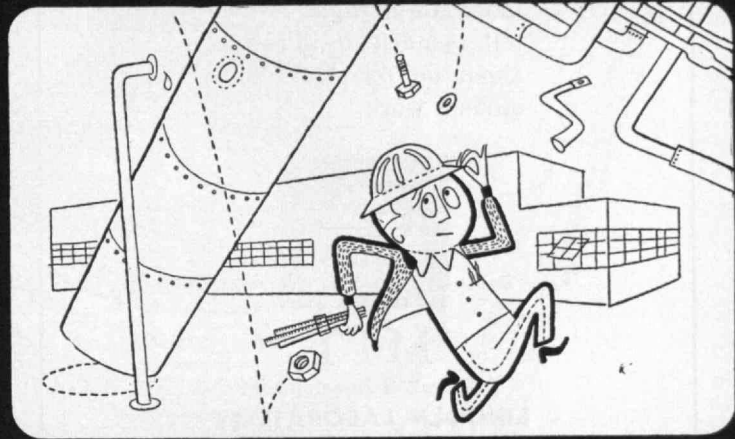
PLANNING A NEW UNIT — OR A COMPLETE PLANT, MILL OR REFINERY?



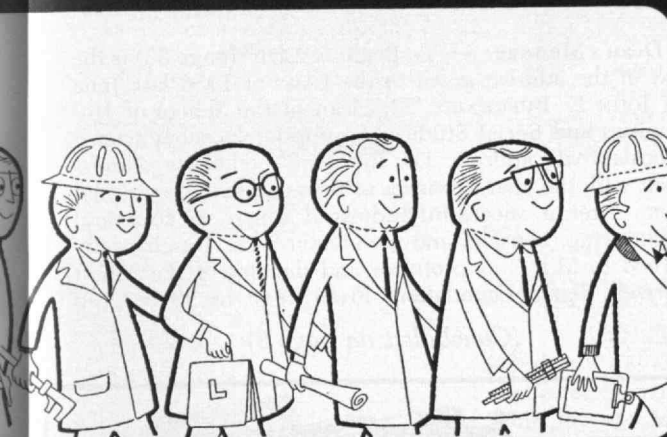
PROBLEMS OF DESIGN AND CONSTRUCTION ARE PILING UP.



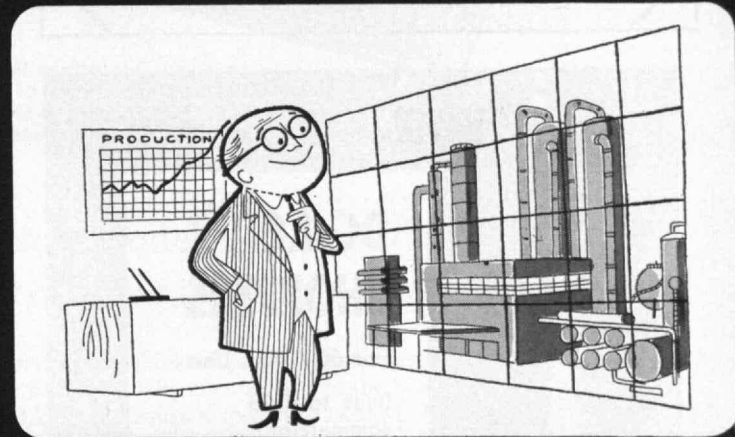
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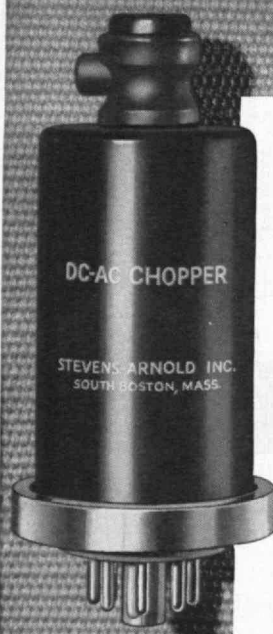
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THE TABULAR VIEW

President's Message. — In his eighth Annual Report to the M.I.T. Corporation (page 29), JAMES R. KILLIAN, JR., '26, President, presented a strong case for advancing education at all levels in the United States, and related the Institute's educational problems to those of the nation. The need for increasing the salaries of those in academic posts was particularly stressed in Dr. Killian's penetrating report which reflects his educational philosophy. Because Dr. Killian's message this year deals so largely with educational topics, it is well to recall that he has been awarded the following degrees: D.Sc. from Middlebury College (1945), Bates College (1950), University of Havana (1953), and Lowell Technological Institute and Notre Dame University (1954); LL.D. from Union College (1947), Bowdoin College, Northeastern University, and Duke University (1949), Boston University and Harvard University (1950), Williams College, Lehigh University, and the University of Pennsylvania (1951), University of Chattanooga (1954), Tufts University (1955), and Amherst College and the University of California (1956); and the D.Eng. degree from Drexel Institute of Technology (1948). Dr. Killian has consistently and ably served his Alma Mater since his graduation in 1926 with a degree in Business and Engineering Administration. He was appointed executive assistant to President Compton in 1939, was made executive vice-president of M.I.T. in 1943, and vice-president in 1945. Following the Mid-Century Convocation in 1949, he became the first Technology Alumnus to serve as its president.

Dean's Message. — "To Begin to Live" (page 33) is the text of the address given to the Class of 1956 last June by JOHN E. BURCHARD, '23, Dean of the School of Humanities and Social Studies. Appropriately enough for a baccalaureate address, Dr. Burchard's scholarly address dealt with the characteristics of the company of educated men. After a successful industrial career in structural engineering, housing, and architecture, Dr. Burchard returned to M.I.T. as professor and director of the Albert Farwell Bemis Foundation. From 1940 to 1945 Dean

(Concluded on page 8)



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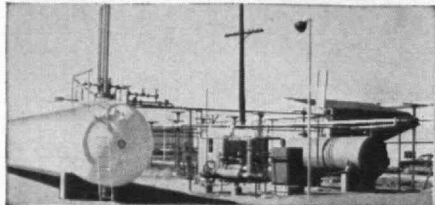
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THE TABULAR VIEW

(Concluded from page 6)

Burchard was on leave of absence for important war work. He returned to M.I.T. in 1945 to become director of libraries, and was appointed dean of humanities in 1948 and dean of the School of Humanities and Social Studies in 1950.

Professor's Message. — Increasingly industry looks to men trained in engineering for its executive talent. The question that naturally arises, "Who is to train engineers for executive posts?" is ably answered (page 36) by JOHN B. RAE, Associate Professor of History. On the M.I.T. staff since 1939, Dr. Rae is currently visiting associate professor of social studies at the Case Institute of Technology, where he is engaged in studying the history of the engineer in business enterprises. His article is a product of a study of the engineer in business which has been supported by the Sloan Research Fund of the M.I.T. School of Industrial Management, the Research Center in Entrepreneurial History at Harvard, and the Social Science Research Council.

Trend of Affairs. — With somewhat different flavor than in the past, the Trend includes contributions from H. E. Lobdell, '17, Executive Vice-president of the Alumni Association under the title "Twenty-five Years Ago This Month" (page 26) and "Individuals Noteworthy" (page 20). Joseph E. Conrad, Regional Director of the Alumni Fund, contributes the text and layout of "First Alumni Fund Conference" (pages 24 and 25).

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Each program is predicated on three assumptions:

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- that the company also benefits continuously by the quality of experience of its college-graduate employees and wants, therefore, to share in making this experience available to others;
- that the college must continue—in the face of new and increasing demands—to offer the college experience, and must have the support of both types of beneficiaries to do so.

If these assumptions are correct, matching programs can be powerful factors in the support of American colleges and universities. Yet such programs can only be successful if college alumni recognize their growing obligations and act upon them.

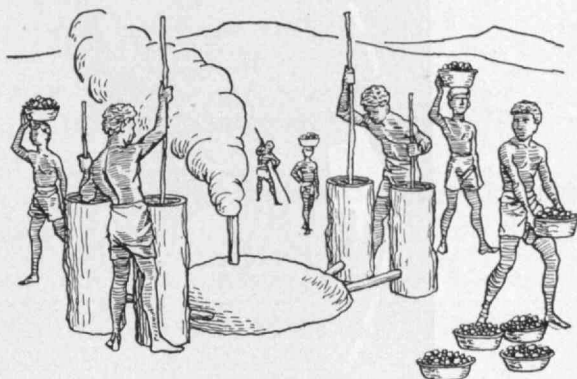
There are many things alumni can do to help their colleges. But the first and easiest thing is to give regularly and substantially to the college gift fund.

GENERAL  ELECTRIC

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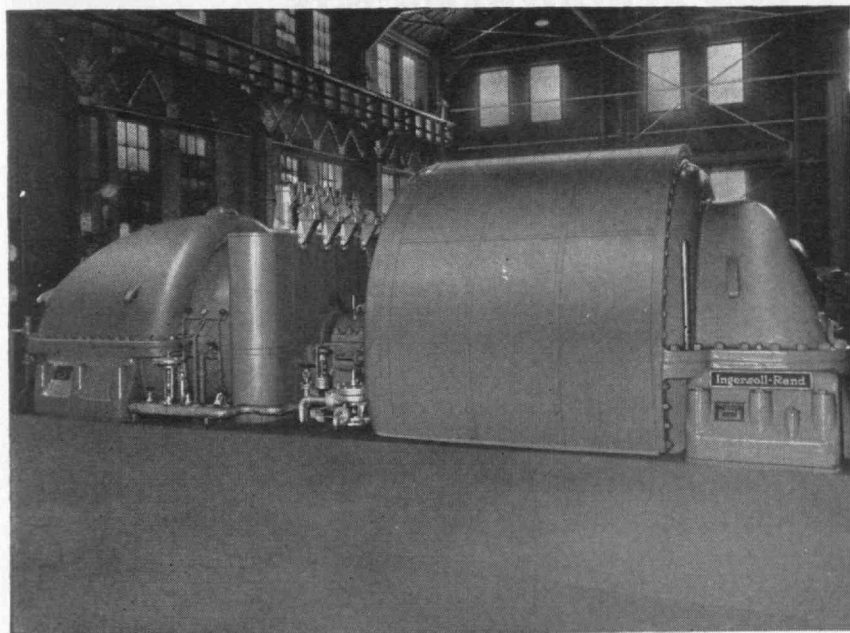
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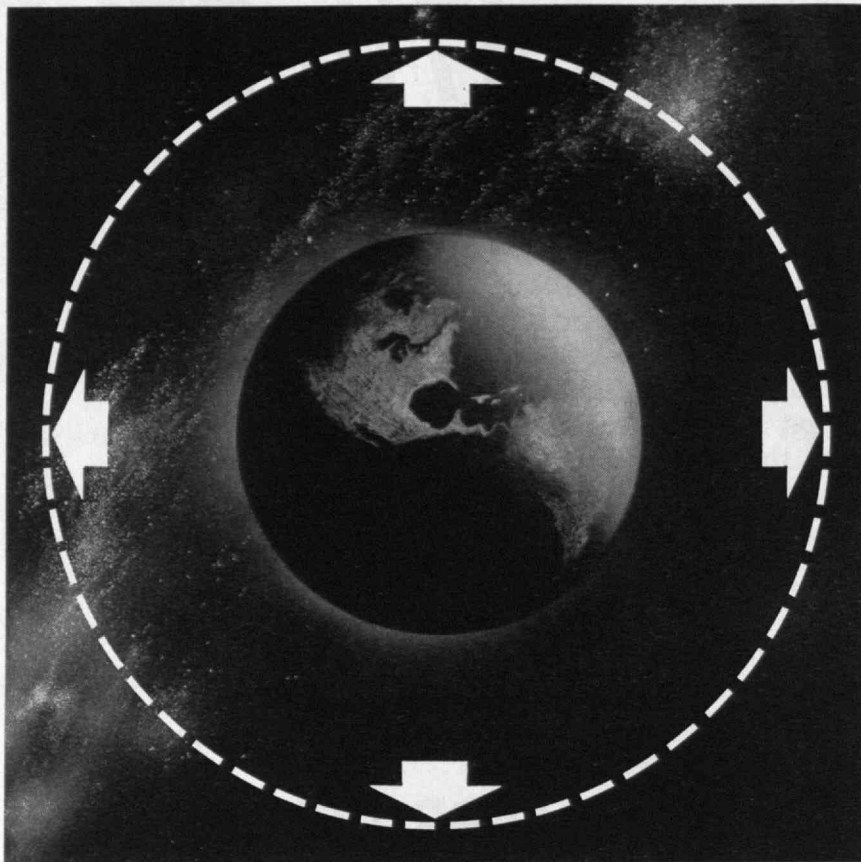
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For the United States Navy: the first fleet operational surface to air guided missile "Terrier," the 80-ton tradewind turboprop transport seaplane, the XFV-1 delta-wing vertical rising-and-landing "Pogo," and a study contract for naval atomic-powered aircraft.

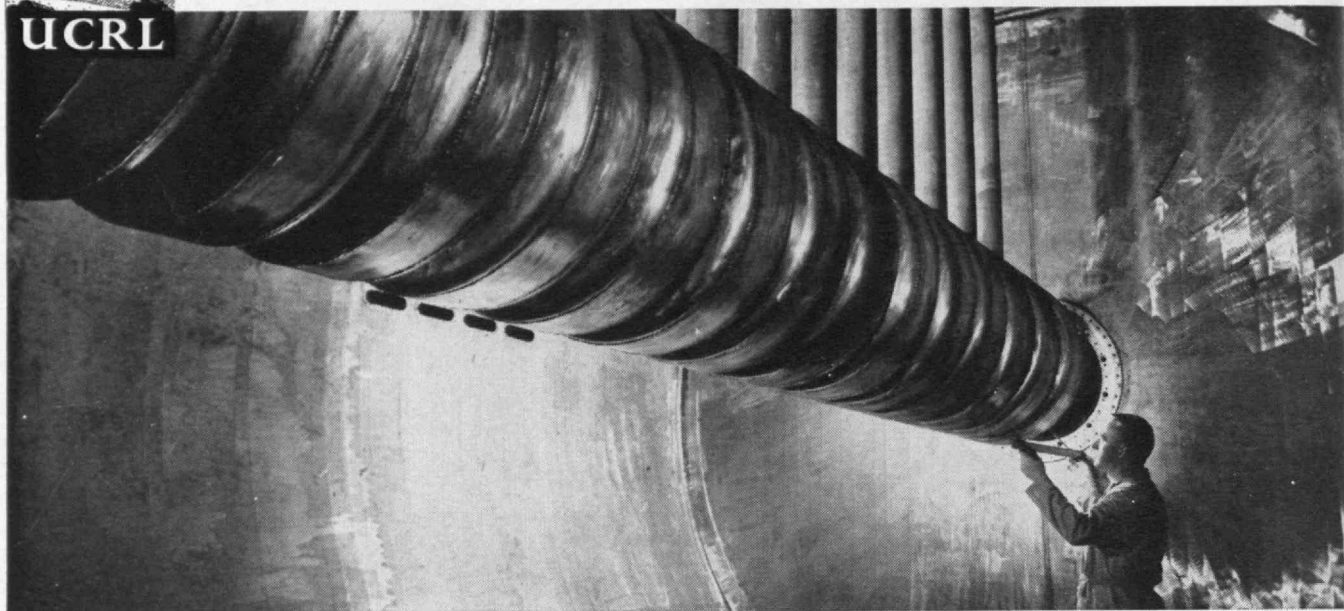
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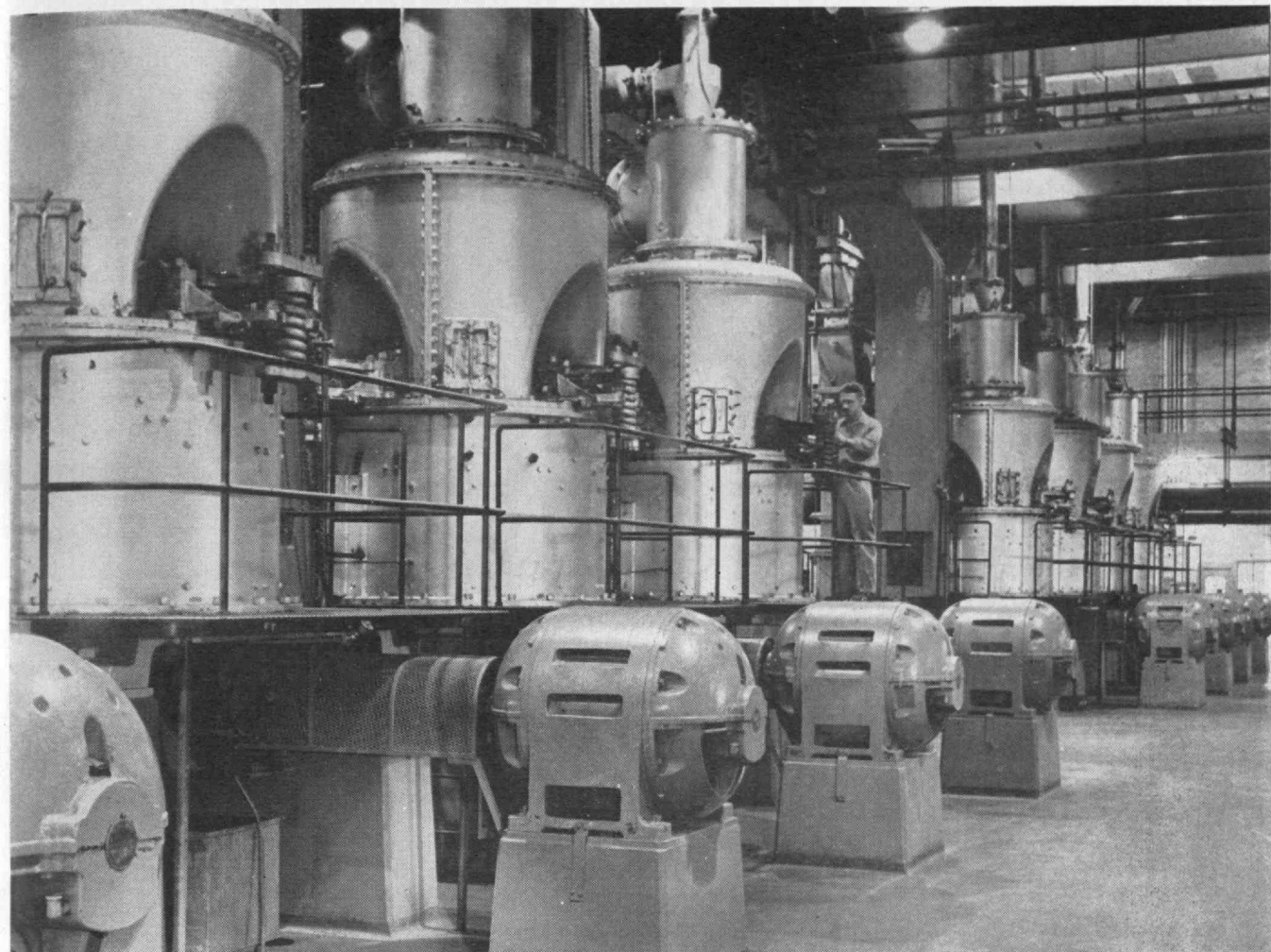
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much coal these mills pulverize, their annual output would fill 3,330,000 railroad cars — a train long enough to encircle the earth.

The nation wide — and in fact, world wide — acceptance of the Bowl Mill is primarily due to its unique grinding principle which assures low power and maintenance costs and superior operating features. But it is also a reflection of the fact that C-E pioneered pulverized coal firing way back in the twenties and equipped the first power station in the world to be designed for the use of this fuel.

Whether your steam requirements can best be met by coal, oil, gas, or any of a number of special fuels — and regardless of the type or size of boiler you need — the C-E line of fuel burning and steam generating equipment can supply just the right installation for your needs.

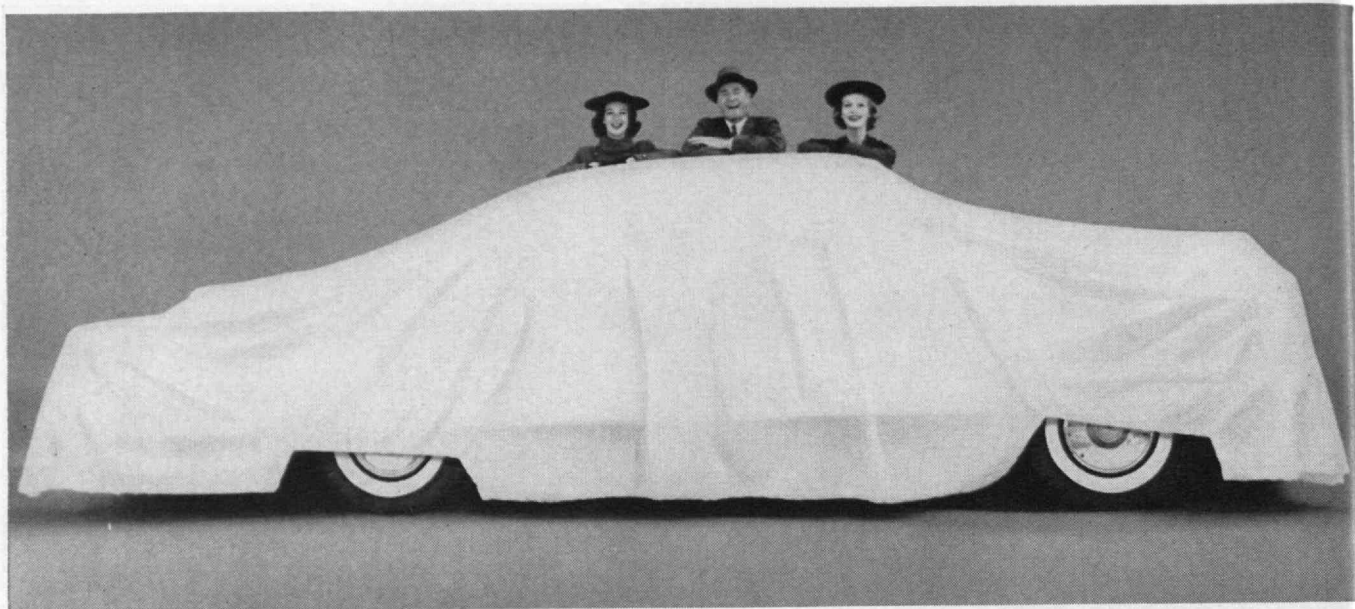
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It's made possible by the Custom Super-Soft-Cushion—the new Goodyear tire that's mated to a lower rim on many of America's newest cars to float you along with *more* air volume at *less* air pressure.

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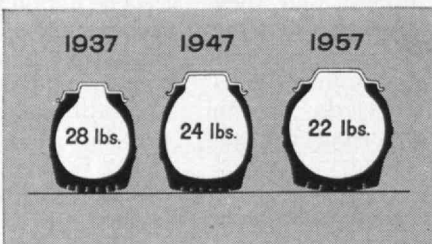
Motorists who won't buy a new car this year can get the same triple-tempered 3-T Cord body, surefooted tread and smart design in an all-new Custom Tubeless Super-Cushion that will fit the wheels of their present cars—and it costs no more than a standard tubeless tire.

Goodyear, Akron 16, Ohio.

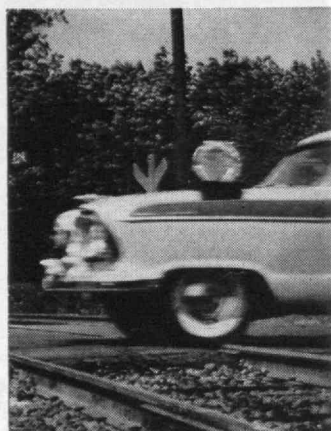
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GOOD YEAR

Look for this nearby Goodyear dealer sign for better tire values...
 better tire care... convenient credit terms.

Super-Cushion, T. M., The Goodyear Tire & Rubber Company, Akron, Ohio

THE TECHNOLOGY REVIEW



Barber-Colman Company
Engineer's view of a school of tomorrow

Technology Review

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M.I.T. Photo

The New M.I.T.

Alumni who return to Cambridge after an absence of several years are frequently surprised at the changes that have taken place in Technology structures during their absence. Looking west, this aerial view of that portion of Cambridge bounded by the Charles River and Vassar Street (right) shows most of the Institute's educational, housing, and athletic facilities.

In the lower left-hand corner may be seen one of the undergraduate dormitories, Walker Memorial (extreme left, only partly showing) and the Charles Hayden Memorial Library, opening on a grass plot and looking toward the Dorrance Laboratory of Biology and Food Technology beyond the parking area. All Alumni will recognize the main group of educational buildings on Memorial Drive near the Harvard Bridge at Massachusetts Avenue. On Memorial Drive beyond (west of) Massachusetts Avenue are: the Graduate House; parking lot; Sancta Maria Hospital (not M.I.T. property); Baker House; Moore House (where the Dean of Residence will live); Conner Hall and Burton House; with industrial buildings in the background where Memorial Drive and Vassar Street appear to converge near the Boston University (formerly Cottage Farm) Bridge.

Coming toward M.I.T. along Vassar Street (right) from the far end are the buildings of Westgate West and Westgate (housing married students); the M.I.T. athletic field; and Rockwell Cage (with double curved roof) to the right of

Briggs Field House, and adjoining the Armory of the Massachusetts National Guard.

Above and almost in line with the two M.I.T. domes is the concrete shell of the Kresge Auditorium. The cylindrical M.I.T. Chapel appears between one of the foundation points of the Auditorium and Bexley Hall.

Beginning at Massachusetts Avenue and continuing toward the bottom of the cut (in line with the Armory) are: the Guggenheim Aeronautical Engineering Laboratory (with Sloan Metals Processing Laboratory to the right on Vassar Street); the Sloan Automotive Laboratory; and Building 24 (built during World War II to house the Radiation Laboratory and now used by the Departments of Geology and Meteorology). Under construction, the new Compton Laboratories may be seen to the left of the Dorrance Laboratory and just below Building 24. In the foreground, just to right of center, is the Alumni Pool below which (at bottom edge of cut) is the 12 M.E.V. high-voltage generator.

The group of low wooden buildings on the left-hand side of Vassar Street are structures erected during World War II and used, for the most part, for research activities. Between Vassar Street and the railroad tracks (right), buildings below (east of) Massachusetts Avenue are service buildings or laboratories. The Hydrodynamics Laboratory is at the extreme lower right-hand corner.



The Trend of Affairs

On the Dean's List

■ Establishment of two new posts in the office of the Dean of Students at the Institute and the appointment of a new associate dean of students were announced on September 27 by Julius A. Stratton, '23, Chancellor.

Frederick G. Fassett, Jr., Associate Dean of Students, has been named M.I.T.'s first Dean of Residence, and William Speer, Associate Dean of Students, becomes the Institute's first Associate Dean for Counseling. Robert J. Holden, General Secretary of the Technology Christian Association, joins the Dean's Office as Associate Dean of Students.

Pointing out that, last June, a committee composed of Corporation, Faculty, and students had proposed a \$7,000,000 student housing program, Chancellor Stratton said:

Mr. Fassett's appointment as dean of residence recognizes the growing residential character of M.I.T., Mr. Speer's appointment as associate dean for student counseling gives increased recognition to the needs and welfare of the individual student, and the appointment of Mr. Holden as associate dean gives added emphasis to the place of extracurricular activities in the educational process.

A member of the staff at M.I.T. almost continuously since 1930, Mr. Fassett inaugurated in 1951 M.I.T.'s faculty residence plan under which selected members of the Faculty and their families live in the undergraduate houses. Dean and Mrs. Fassett have been living in Baker House. As dean of residence, Mr. Fassett will be concerned with all M.I.T. living groups, and he and Mrs. Fassett will occupy Moore House on Memorial Drive, adjacent to Baker House.

Dean Speer, formerly headmaster of the Loomis School at Windsor, Conn., has been associate dean of students at M.I.T. since 1953. Except for four years when he was with the U.S. Navy during World War II, he has been continuously associated with the education of young people since 1933.

A graduate of Harvard Divinity School in 1942, Mr. Holden was serving as pastor of the First Congregational Society (Unitarian) in New Bedford, Mass., when he came to M.I.T. in 1953 as general secretary

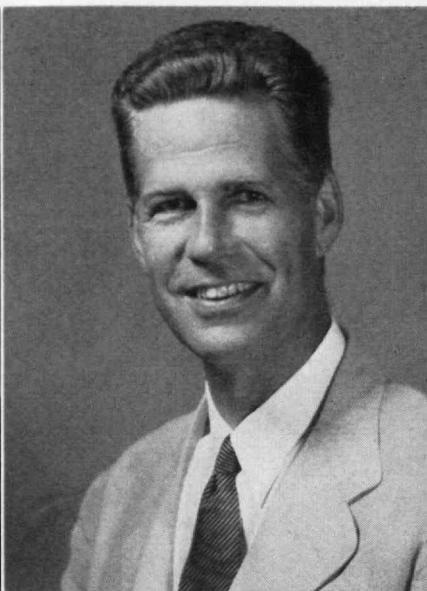
of the Technology Christian Association. He and Dean Speer will continue to share liaison with the clergy at M.I.T.

Dean Fassett was born in Portland, Maine, in 1901, the son of the late Frederick G. Fassett (for many years associated with the *Boston Evening Transcript*) and Cora Jordan Fassett (also a journalist). He was educated in the public schools of Portland and Waterville, and Coburn Classical Institute of Waterville, and then entered Colby College, from which he received the A.B. degree in 1923 and A.M. in 1927. He was an assistant in journalism at Colby College from 1926-1927 and an instructor in English at the University of Maine from 1927-1930. He received the A.M. degree in 1930 from the University of Maine. He married Miss Julie Pattangall, also a Colby graduate, and daughter of the late William R. Pattangall, Chief Justice of the Supreme Judicial Court of Maine.

Dean Fassett joined the M.I.T. staff in 1930 as an instructor in the Department of English and History (now Humanities), and was named assistant professor of English in 1934 and associate professor in 1938. Chairman of the Advisory Council on Undergraduate Publications, he also served as chairman of first-year instruction in his Department and as a member of committees on revision of the curriculum, first-year instruction, and admissions from 1934-1938. In 1938 he was appointed editor of *The Review*, of which he had been an editorial associate since 1935.

Dean Fassett left M.I.T. in 1945 to become director of publications and public relations for Carnegie Institution of Washington, a post which he held until returning to the Institute in 1951 as director of publications (1951-1953), Summer Session (1951), and the Technology Press (1951-). In 1952 he was appointed associate dean of students.

A native of Englewood, N.J., where he was born in 1910, Dean Speer was educated in the Englewood public schools, the Hotchkiss School, and Princeton University, from which he received the A.B. degree in 1933. At Princeton he majored in philosophy and was on the junior varsity crew. From 1933 to 1941 he taught at the Asheville School in North Carolina and the Shady Hill School in Cambridge, where he was a faculty member of the board of overseers.



M.I.T. Photos

New posts in the Dean's Office will be filled by (left to right): Frederick G. Fassett, Jr., who has been appointed dean of residence; William Speer, recently named associate dean for counseling; and Robert J. Holden who comes to the Dean's Office as associate dean of students after serving as General Secretary of the Technology Christian Association.

In 1941, Mr. Speer served as assistant to the headmaster of the Gilman School in Baltimore, until 1942, when he entered the U.S. Naval Reserve and saw sea duty in the Atlantic and the Pacific. Upon his return to civilian life in 1946, Mr. Speer served as director of admissions and director of student life at Rutgers University. He served the Loomis School as headmaster from 1949 to 1952. In September, 1952, he became a counselor in the Bureau of Study Counsel at Harvard University and in 1953 was appointed associate dean of students at M.I.T.

Dean Holden was born in Natick, Mass., and attended the Natick public schools. He was graduated from Albion College in Albion, Mich., with the A.B. degree in 1939, and from the Harvard Divinity School he received the S.T.B. degree in 1942.

Mr. Holden's first parish assignment was as assistant minister of the First Unitarian Church in Cleveland, where his superior was the late Everett M. Baker, former Dean of Students at M.I.T. During World War II he was a chaplain with the U.S. Navy, serving at the Marine Base at Camp Lejeune, N.C., and with the First Marine Division in North China between 1944 and 1946.

From 1946 until he joined the staff at M.I.T. in 1953, he served as minister of the First Congregational Society (Unitarian) in New Bedford.

Individuals Noteworthy

■ Prominent in the news, since The Review's last issue, have been the 14 alumni promotions, elections, or appointments enumerated below:

John S. Ellithorp, Jr., '17, as President, Beech-Nut Life Savers, Inc. . . . John W. Barriger, 3d, '21, as President, Pittsburgh and Lake Erie Railroad . . . Robert L. Moore, '21, as Chairman, Sheraton Corporation . . . Frederick S. Blackall, Jr., '22, as Director, American Screw Company . . . Richard L. Bowditch, '23, as Chairman, American Coal Shipping, Inc.;

David W. Skinner, '23, as Vice-president and General Manager, Polaroid Corporation . . . Andrew Anderson, Jr., '27, as Vice-president in Charge of Manufacturing, Underwood Corporation . . . Clarence L. A. Wynd, '27, as Vice-president, Eastman Kodak Company . . . Professor Howard P. Emerson, '28, as President, American Institute of Industrial Engineers . . . George H. Freyermuth, '28, as Chairman, Esso Export, Ltd. and Standard Oil International, Ltd.;

G. Ross Lord, '32, as Head, Department of Mechanical Engineering, University of Toronto . . . Dayton H. Clewell, '33, as manager of laboratories, Socony Mobil Oil Company . . . Major General William E. Potter, '33, as the 12th Governor of the Canal Zone . . . Robert C. Casselman, '39, as Vice-president in Charge of Sales, Polaroid Corporation.

■ During the summer, special honors came to two members of the Institute Faculty:

To H. Guyford Stever, Associate Dean of the School of Engineering, the Exceptional Civilian Service Award by the United States Air Force for his accomplishment as its Chief Scientist from February 1, 1955, to July 31, 1956. The citation read in part: "Through his ability as a scientist, his understanding of long range military needs, and his complete devotion to the welfare of the nation, he has assisted in the early solution of highly technical, scientific, and unusual management problems vital to national defense."

To Milton C. Shaw, Professor of Mechanical Engineering, the 11th annual George Westinghouse Award by the American Society for Engineering Education.

■ Appointed from the White House as members of a 10-member team of scientists and engineers organized to study the long-range needs of the nation's airways and make recommendations by January, 1957, were: Samuel N. Alexander, '35, Ralph P. Johnson, '36, Lloyd J. Perper, '41, and Michael Witunski, '43.

Killian Greets Freshmen

■ Greeting the incoming class of more than 900 freshmen who registered at M.I.T. on September 12, James R. Killian, Jr., '26, President of the Institute, emphasized that "science and engineering are bringing about explosive changes in our way of life."

"There has never been a time when more was expected of scientists and engineers, when high quality ones were in greater demand, and when there was such a wide range of important work for them to accomplish," Dr. Killian told M.I.T. freshmen at a convocation in Kresge Auditorium.

"In their discoveries and advances they move from one triumph to another," Dr. Killian said, "and the scientist, engineer, manager, and architect in consequence become of greater importance to the economy, the health, the safety, and the advancement of the nation. At the same time that their responsibilities thus become greater, the requirements which rest upon them become more severe. Society and the advancing complexity of their work exacts of them increasingly greater competence, and penetration of their specialty, and breadth of outlook."

Dr. Killian also warned the new M.I.T. students that some of them would feel "frustrated by the arduous process of drill and learning and testing which is essential to becoming a professional man. But one comes to understand science and its applications from the toughening experience of actually doing science, of penetrating its theory and method, of accumulating its facts, and of gaining power in the mathematics which scientific work requires."

The advantages of extracurricular activities were also stressed when President Killian remarked:

"In activities as well as in academic work, M.I.T.'s aim is to develop self-starting, self-directing, self-reliant individuals, each seeking for himself some accomplishment of distinction."

Freshman Week End

■ More than 900 freshmen arrived in Cambridge on September 12 to begin traditional Freshman Week End activities at the Institute. An additional 4,800 upperclassmen and graduate students registered on Monday, September 17, to bring the expected total enrollment for the fall term at M.I.T. to about 5,750. Classes began for all students on September 18.

The first class meeting for the new students was held on the morning of September 13 in the Kresge Auditorium, with James R. Killian, Jr., '26, as the principal speaker. Other speakers included: Professor John T. Rule, '21, who is beginning his first year as dean of students at M.I.T.; Charles N. Satterfield, '43, Associate Professor of Chemical Engineering, who this fall begins his first term as chairman of the Faculty Freshman Advisory Council; Richard L. Balch, Director of Athletics; and Dr. John W. Chamberlain, '28, Associate Medical Director. Malcolm M. Jones, '57, President of Student Government at M.I.T., also addressed the new students.

Other freshman events scheduled for Freshman Week End included informal group meetings, athletic programs, and a tea for women students. Each

On the Horizon

November 14, 1956 — M.I.T. Club of New York will hold its annual Stein Presentation Dinner at the Hotel Biltmore in honor of Alfred P. Sloan, Jr., '95. Crawford H. Greenewalt, '22, and James R. Killian, Jr., '26, President, will participate. For reservations, communicate with C. George Dandrow, '22, M.I.T. Club of New York, Hotel Chatham, 48th Street at Vanderbilt, New York City. (PLaza 5-3094)

January 30, 1957 — Midwinter Meeting of the Alumni Association. Walker Memorial, M.I.T. Campus. (Dinner 6:00 P.M. Reservations should be made through Alumni Office, Room 1-280, M.I.T.)

February 2, 1957 — 9th M.I.T. Alumni Regional Conference, Tulsa, Okla. (For further information, consult Barrett B. Russell, 3d, '43, E. I. du Pont de Nemours and Company, 1811 South Baltimore Avenue, Tulsa 19, Okla.)

February 16, 1957 — 10th M.I.T. Alumni Regional Conference, Chicago, Ill. (For further information consult John R. Kirkpatrick, '48, Arthur D. Little, Inc., 9 South Clinton Street, Chicago 6.)

March 14-16, 1957 — 9th Annual Fiesta, M.I.T. Club of Mexico, Mexico City, D.F. (For reservations consult Clarence M. Cornish, '24, Margaritas 139, Villa Obregon, Mexico 20, D.F., Mexico.)

June 10, 1957 — 23d Alumni Day, 1957, M.I.T. Campus.

entering student was also the guest of his faculty adviser at dinner.

During Freshman Week End each new student met several times with his faculty adviser, a member of the Freshman Advisory Council which has been established by the Faculty of the Institute to further close student-teacher relationships and to aid the development of freshmen in professional competence and well-rounded growth.

Athletic and activities exhibits and rallies were held on Saturday, September 15, and freshman activities were concluded with a reception on Sunday by President and Mrs. Killian for the new students and their parents.

The Freshman Week End activities disclosed a wealth of athletic talent among the entering class. About a quarter of the new men had been varsity team players in high school and more than 70 of them were varsity team captains. Not one of the athletes entered the Institute on an athletic scholarship, however, for M.I.T. does not award them. But about a third of the new freshmen are receiving scholarship grants on the basis of academic promise and financial need.

In addition to being talented athletically, more than 100 of the freshmen were class officers in their preparatory schools and more than 400 were club officers.

This year's freshman class at M.I.T. comes from every state in the union and from more than 25 foreign countries as well.



Metropolitan Photo

A week end of fun and fellowship, while attending their 25th reunion on June 8-10, was enjoyed by members of the Class

of 1931 shown above, and on the opposite page, with their wives and children. Baker House served as reunion head-

Extraterrestrial Energy

■ Physicists at the Institute are catching cosmic ray showers in tubs in a unique "laboratory" covering some hundred acres of New England countryside. They are looking for clues that may help solve important problems in astronomy, nuclear physics, and cosmic ray research. No one knows where cosmic rays come from or where they get their fantastic energy, but the experiments now under way may suggest some answers.

Cosmic rays are particles which bombard the earth from outer space. They hit us continuously with energies far greater than man can make — energies which sometimes exceed 100 million billion electron volts. Scientists do not study cosmic rays directly; instead they study the electron showers which are produced when the cosmic particles plunge headlong into the earth's atmosphere.

To catch these electron showers the experimenters have spread some 16 tubs over a large circle of countryside more than a quarter of a mile in diameter at Harvard University's Agassiz Observatory site in Harvard, Mass.

The catching tubs contain a plastic material which emits little splashes of light when electron showers pass through it. These light splashes are counted electronically. When a shower contains at least a million particles — and million-particle showers occur at the experiment site at the rate of about one an hour — an automatic photographic record is made. Data are analyzed by M.I.T.'s Whirlwind I computer.

By reasoning backward from their records, scientists expect to be able to learn more about the structure of cosmic ray showers, about the fantastic energy of the particles that have caused them, and about the directions from which they arrive.

Information on the abundance and direction of arrival of cosmic rays should be useful to astronomers and physicists in estimating the extent and shape of our Galaxy, the great aggregate of stars of which our solar system is a part. The physicists also expect to get new information about interactions between certain elementary particles which should be helpful to theoretical nuclear physics.

A similar cosmic ray experiment this summer was also conducted at Kodaikanal, India. The Indian experiment was directed by George W. Clark, '52, Assistant Professor of Physics at M.I.T., in co-operation with B. Vikraam Sarabhai of Ahmedabad. The purpose of this experiment is to study cosmic rays entering from the equatorial region of the sky. Because of atmospheric absorption, these rays are not available in M.I.T.'s latitude.

Professor Bruno B. Rossi, the physicist in charge of the Institute's cosmic ray research, hopes that eventually there may be a number of field stations around the world participating in the research.

In charge of the large air shower experiment in Massachusetts are three assistant professors of physics at M.I.T. They are William L. Kraushaar, John D. Linsley, and George W. Clark, '52, who as reported above, is now in India.



quarters and facilities of the M.I.T. campus provided ample accommodations for reunion activities. Ably assisted by several

committees was Charles W. Turner, general chairman of this successful and happy affair which culminated on Alumni Day.

Computer "Know-How" for Industry

■ Jay W. Forrester, '45, one of the nation's leading engineers in the design and application of large-scale digital computers, has become professor of industrial management in the Institute's School of Industrial Management.

The new appointment, announced by E. P. Brooks, '17, Dean of the School, became effective on July 1. "Dr. Forrester's appointment," he said, "will assure the School of preeminence in the field of applying computers and automatic control systems in industry. Industry has been hard-pressed to keep abreast of computer development and to realize the important advantages and savings which these new devices now make possible. Dr. Forrester will lead the School in a large-scale research and teaching program on the problems of using computers for data processing and for analyzing business problems."

As head of the Digital Computer Division of the M.I.T. Lincoln Laboratory, Dr. Forrester has guided the technical design of the Air Force SAGE System for continental air defense, one of the most extensive applications thus far of digital computing techniques.

While at Lincoln Laboratory and earlier in the Servomechanisms Laboratory at M.I.T., Dr. Forrester developed the method of "random access magnetic storage" which is now the standard "memory" device for reliable, high-speed digital computers. The system consists of honeycombs of minute magnetic cores, strung on wires.

From 1946-1951, as Associate Director of the M.I.T. Servomechanisms Laboratory, Dr. Forrester was responsible for the design and construction of Whirlwind I, M.I.T.'s first high-speed digital computer which later became the prototype and testing ground for many SAGE developments. Since 1951, while serving as division head of the Lincoln Laboratory, Dr. Forrester has continued as director of the M.I.T. Digital Computer Laboratory operating Whirlwind on many problems of the science and engineering departments at M.I.T. and elsewhere. This work has demonstrated the usefulness of computers in many fields and has laid a foundation for the new Computation Center which is now being established at M.I.T. to serve New England colleges in co-operation with the International Business Machines Corporation.

Dr. Forrester was born in Anselmo, Neb., in 1918, and he was graduated from the University of Nebraska in 1939 "with high distinction." He came to M.I.T. as research assistant in Electrical Engineering in that year and in 1941 became a member of the new M.I.T. Servomechanisms Laboratory. His master's degree in Electrical Engineering was awarded by M.I.T. in 1945.

Dr. Forrester was honored by his alma mater in 1954, when he received the honorary doctor of engineering degree at the University of Nebraska. He was cited in 1948 by Eta Kappa Nu as an outstanding young electrical engineer and last year became a fellow of the Institute of Radio Engineers.

First Alumni Fund Conference



M.I.T. Photos

The 108 guests who attended the first Alumni Fund Conference were an attentive, absorptive audience for the story of what's and who's news at M.I.T. Class Agents, Special Gifts Chairmen, and Regional Representatives gathered at the Institute on September 7 and 8 for sessions on the Institute's past history and future plans, to hear the administrative officers discuss M.I.T.'s policies and operation, and to lay out plans for the 1957 Alumni Fund.



regional Personal Solicitations to expand the number of contributors to the Fund — participation has been 30% to 35% for the past 10 years; and the initiation of the first Alumni Fund General Scholarships — 53 boys from 37 states will attend M.I.T. this year from these scholarships totaling \$50,000; and the anticipation that the 1957 Fund shall accede to the standards of the previous Fund years.

Robert M. Kimball, '33, Secretary of the Institute, shown at the rostrum in the Kresge Auditorium Little Theater, spoke warmly of the part the Alumni have played in the \$10,000,000 of gifts that were received by M.I.T. this year. Kimball estimated that the M.I.T. Alumni were either directly or indirectly responsible for 95% of these gifts. Seated, left to right on speakers'



platform are: Institute Treasurer Joseph J. Snyder, 2-44; Associate Dean Thomas P. Pitre, Director of Student Aid; and Professor B. Alden Thresher, '20, Director of Admissions.

President James R. Killian, Jr., '26, acknowledged the major role performed by the Alumni Fund workers, citing the facilities and services on the M.I.T. campus that the Alumni Fund helped make possible: Baker House, Hayden Library, Compton Laboratories, and the Scholarship Program. Dr. Killian also stated that M.I.T. is now the largest foundation in the United States for operating a school of technology. Other guests at the speakers' table — Professor Jose C. Bertino, '23, of University of Buenos Aires; H. E. Lobdell, '17, Association Executive Vice-president; and Avery H. Stanton, '25, Fund Board Chairman. Obscured by Dr. Killian is Harvard Fund Director David McCord.



Alumni Fund Board Chairman Avery H. Stanton, '25, made the presentation of the Alumni Fund's performance and service awards. Receiving awards were:

- | | |
|--|--|
| Edward H. Davis, '01
(Photo: Below Right) | Non-Reunion Class with highest participation (1901-60%) |
| Mark H. Baxter, '50 | Class having greatest number of contributors (1950-466) |
| Parke D. Appel, '22 | Class giving greatest amount since inception of Fund (1922-\$178,680) |
| Charles W. Loomis, '16 | Class with greatest amount from Special Gifts prospects (1916-\$7,308) |
| E. Sherman Chase, '06 | Outstanding performance in Reunion giving (50th) |
| Edward B. Hubbard, '31 | Outstanding performance in Reunion giving (Co-Chairmen — 25th) |
| Ralph H. Davis, '31 | Greatest participation, Personal Solicitation Region over 100 Alumni (Milwaukee — 53.6%) |
| Wm. H. Schield, Jr., '46 | Greatest participation, Personal Solicitation Region less than 100 Alumni (Nashua, N.H. — 86.4%) |
| Louis A. Arnold, '42 | |

Service Awards for serving as Class Agents since 1940 inception of Alumni Fund:

- Harry H. Young, '91
Edward S. Chapin, '98
Burt R. Rickards, '99
Charles E. Smith, '00
Orville B. Denison, '11
Laurence C. Hart, '13
Royal Barry Wills, '18
Alf K. Berle, '27
L. H. Flanders, Jr., '33



Key addresses of the two-day conference were given by M.I.T. Chancellor Julius A. Stratton, '23, and Association President Theodore T. Miller, '22.

Chancellor Stratton (*below, left*) told the conferees of three major policies in which direction the Institute is moving.

1. Student housing facilities need be expanded. Of today's 5,500 students 2,200 are housed on campus. Since a residential community contributes to the educational process, more campus housing should be provided for undergraduates, graduates, and married students. There is a problem of both location (Are we wrong in dividing our campus by Massachusetts Avenue?) and expense (Should a student pay the entire cost of housing whereas he pays only half his educational costs?). Present plans are for the West Campus to be the focus of attention for undergraduate activity and the East Campus the center of graduate housing.

2. Curriculum has been changing in both substance and method of approach. Engineering education in the United States today is at the crossroads with questions being raised as to whether an engineering education has become obsolete and the accusation made that it has failed to keep pace with science and industry. Changes

should be made in the Institute's curriculum. Engineering has become complex and sophisticated necessitating increasing emphasis on systems design. The components are still important but subordinate to systems. There is a need to examine the widening gap between educational need versus limitations of four-year work; perhaps M.I.T. should begin experimentation with a five-year program. Humanities are not diluting science and engineering when today's society demands so many diverse talents of its mem-

bers. Students thus should not break away too soon from a general program to a specialized one.

3. Graduate enrollment at the Institute is increasing: 2,000 students of M.I.T.'s 5,500 total enrollment are taking graduate work; 30 years ago the ratio was one in 10. Industry today demands more graduate degrees which has resulted in M.I.T. shifting the emphasis from a predominantly undergraduate education. There is a definite movement toward graduate and post-doctoral work. We may foresee the time when there will be about an equal balance of undergraduate and graduate enrollment.

President Miller (*at right*) introduced his remarks with a review of the Association's past accomplishments: the eight Regional Conferences sponsored by the Alumni Clubs; Alumni Day; Midwinter Meeting; Alumni Council Meetings; two thirds of M.I.T. Corporation are Alumni; the Ryer study of student housing, headed by Edwin D. Ryer, '20, former Alumni Association President.

Looking ahead for the Alumni Fund, 1965 has been established as the target year for Fund accomplishment, the silver anniversary of the 1940 founding of the Alumni Fund. The goals are a \$1,000,000 gift total and a 60% participation. This can reasonably be accomplished with the cooperation of our Alumni through the work of the Class Agents, Special Gifts Chairmen, and Regional Personal Solicitations.

Top project for the coming year is the sponsoring of a program to acquire more quality in the teaching of science in the secondary schools. Our association publications and communications will be used for this purpose. On a local level the Alumni Clubs will be asked to undertake activities that will locally improve science teaching and encourage the top student to study to become science teachers.



Conference on Information Theory

■ Technical discussions of current theories on information and communication drew more than 300 scientists and engineers to the Institute on September 10 for the opening of a three-day symposium. Peter Elias, 2-44, Associate Professor of Electrical Engineering at M.I.T., was chairman of the Planning Committee for the symposium.

The symposium was organized jointly by M.I.T.'s Research Laboratory of Electronics and the Professional Group on Information Theory of the Institute of Radio Engineers. Additional sponsors included the International Scientific Radio Union, the Office of Naval Research, the Air Research and Development Command, and the Signal Corps Engineering Laboratories.

Nineteen papers were presented by research workers on such topics as coding information, information sources, problem-solving by machines, the effects of noise on communication efficiency, technical differences in languages, and the human memory as an information-storing device. While discussions were on a theoretical level, they pointed toward such problems as increasing the number and range of television channels, mechanical transcription and translation of languages, and matching communication systems more effectively to the people who use them.

Norbert Wiener, Professor of Mathematics at M.I.T., and one of the pioneering scientists in information theory, spoke at the symposium banquet which was held at the M.I.T. Faculty Club, and was well attended.

Twenty-five Years Ago This Month . . .

■ The Institute mourned the passing of Samuel Wesley Stratton, its eighth president from 1923–1930, when he became chairman of the Corporation. Born at Litchfield, Ill., on July 18, 1861, he was graduated as a member of the Class of 1884 at the University of Illinois and continued as a member of its staff until 1892, when he was appointed to the faculty of the University of Chicago, where he became professor of physics in 1898.

For a number of years Dr. Stratton had been interested in the establishment of a National Bureau of Standards at Washington, and in 1900 he brought this matter to the attention of Lyman J. Gage, who was then Secretary of the Treasury. Dr. Stratton was asked to draft a bill for the establishment of such a bureau, and it was largely through his efforts in presenting the proposal before Congress that the bill was passed on March 3, 1901. He was then appointed director of the new bureau and served in that position until 1923. Under his leadership, the Bureau of Standards grew from a very small institution, employing a few workers in science and housed in temporary quarters near the Capitol, to a staff of over 900 housed on its own site.

In 1923 Dr. Stratton was asked to become president of M.I.T., and from that time until 1930 he served with distinction as the chief administrator of the Institute. In 1930, at his suggestion, the Corporation decided to divide the heavy executive responsibili-

ties, and Karl Taylor Compton, noted physicist, became M.I.T.'s ninth president. Dr. Stratton then became chairman of the Corporation, a post he occupied at the time of his death from a coronary occlusion on October 18, 1931.

. . . Congratulations were being extended to Lois L. Howe, '90, upon becoming the first woman to be elected a fellow of the American Institute of Architects; to Mary O. Soroka, '26, upon becoming the first woman to receive a certificate as civil engineer from the authorities of the state of New York; and to three recent recipients of honorary doctorates—President Karl T. Compton from Stevens Institute, John R. Freeman, '76, from Yale, and Arthur D. Little, '85, from Columbia. Drs. Freeman and Little, who were life members of the Institute Corporation, had previously served, respectively, as the 7th and 28th presidents of the Alumni Association in 1897–1898 and 1921–1922.

. . . The Faculty welcomed three new members: Ralph E. Freeman as Associate Professor of Economics; Philip M. Morse and Wayne B. Nottingham as Assistant Professors of Physics.

Witold Hurewicz: 1904–1956

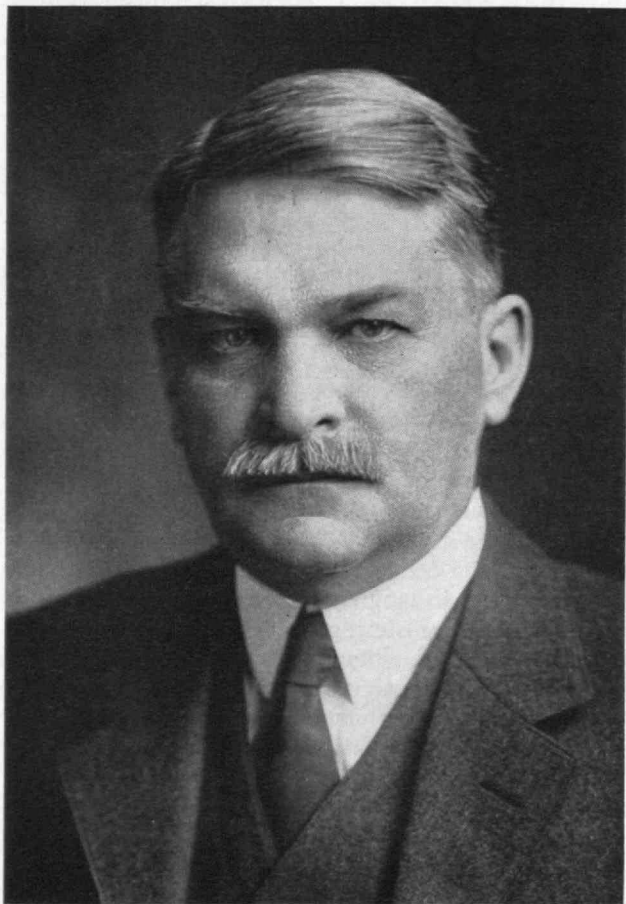
■ Witold Hurewicz, Professor of Mathematics, died in Yucatan, Mexico, on September 6. He had been injured the previous day while climbing in ancient ruins during a vacation trip to Yucatan. During August, Dr. Hurewicz had been in Mexico City attending a mathematics conference and then he went on a vacation trip to Yucatan, planning to return to M.I.T. for the beginning of classes in September.

Professor Hurewicz was known as one of the world's most creative mathematicians. He published his first research paper in 1927 and his most recent one only a few months ago. His extreme originality in creating mathematical concepts was shown in a series of papers in 1935 in which he founded homotopy theory, today the major branch of topology which has become one of the main topics of mathematical research throughout the world.

His fundamental work on the topological theory of dimension was the basis of his well-known book, *Dimension Theory*, which he wrote in collaboration with Henry Wallman. In addition to his work in algebraic topology, Professor Hurewicz made significant contributions to set-theory, theory of functions of a real variable, ergodic theory, differential equations, and point-set topology.

His generosity and warmth toward all his colleagues and students, and his devotion to science reflected his deep-rooted belief in the essential unity of science and human ideals.

A native of Lodz, Poland, Professor Hurewicz received his Ph.D. from the University of Vienna in 1926 and was a lecturer at the University of Amsterdam before coming to the United States in 1936. During World War II he was on the staff of the Institute's Radiation Laboratory, and he joined the M.I.T. Faculty in 1946. A naturalized American, Professor Hurewicz was a fellow of the American Academy of Arts and Sciences and a member of Sigma Xi, the American Mathematical Society, and the Association of Cambridge Scientists.



Samuel Wesley Stratton: 1861–1931

From a photograph made by Harris and Ewing at the time of his election as M.I.T.'s 8th President.



Sidney B. Moody

Photographed while celebrating their 50-year reunion on the week end of June 8 at Snow Inn, Harwichport, were the following members of the Class of 1906 and their wives (Left to right, sitting): William J. Cady, Floyd M. Fuller, Charles H. Shapleigh, Guy H. Ruggles, Herbert J. Ball, Ernest M. Smith, James B. L. Orme, Mrs. Orme, William G. Abbott, Jr., Mrs. Tillson, Percy E. Tillson, Richard V. McKay, Edwin B. Bartlett, Mrs. Harold V. Coes, and Edward B. Rowe. (Standing, left to right or front to rear): Samuel L. Ware, Harold W. Beers, Burton W. Kendall, Mrs. Ware, Mrs. Darling, Mrs. Charles H. Shapleigh, Mrs. Kendall, Henry E. Darling, Mrs. Coey, Otto B. Blackwell, Stewart C. Coey, Mrs. Kidder, James W. Kidder, Herbert L. Williams, Mrs. Ross, Robert J. Ross, Terrell Bartlett, Mrs. Kearney, Mrs. Floyd M. Fuller, Stephen Kearney, E. Sherman Chase, Mrs. Chase, Allyn C. Taylor, Mrs. Taylor, Mrs. Herbert W. Dean, Mrs. Guernsey, George R. Guernsey, Andrew B. Sherman, Herbert W. Dean, Mrs. Sherman, Sherley P. Newton, Thomas L. Hinckley, Mrs. Walsh, Mrs. Hinckley, William J. Walsh, Harry L. Lewenberg, Harold V. Coes, Mrs. Lewenberg, Mrs. Edward B. Rowe, Chester A. Hoefer, and Mrs. Hoefer.

Administration of Sponsored Research

■ A new Division of Sponsored Research has been established at the Institute, according to Edward L. Cochrane, '20, Vice-president for Industrial and Governmental Relations. In replacing both the Division of Industrial Cooperation and the Division of Defense Laboratories (which now cease to exist), the new Division of Sponsored Research makes possible the establishment of unified administrative policies for all research work at M.I.T.

Research work at the Institute is largely sponsored either by private enterprise or by governmental agencies, such as the Department of Defense, the Atomic Energy Commission, the National Science Foundation, or the National Institutes of Health.

Privately supported research and a substantial proportion of the government-sponsored research (other than the urgent defense work performed for the Department of Defense) is a vital part of the educational program. It is conducted under the scientific and technical direction of the Faculty in the campus laboratories. The urgent defense work done for the Department of Defense, on the other hand, is largely conducted in defense laboratories and is generally independent of academic departments. Because of the urgency of such work, the personnel involved are devoted solely to its effective accomplishment. The new Division of Sponsored Research has now taken over policy guidance and general administration for both kinds of research.

F. Leroy Foster, '25, who succeeded the late Nathaniel McL. Sage, '13, as Director of the Division of Industrial Cooperation, has been appointed director of the newly created Division of Sponsored Research.

He is a former member of the Faculty and nationally recognized in the field of research administration.

James M. West, who was an assistant in the Division of Defense Laboratories, has been made associate director of the Division of Sponsored Research. He is a graduate of Dartmouth College (1935). Thomas W. Harrington, Jr., has been appointed assistant to the director for personnel administration. He is a graduate of Harvard University (1950).

Deutsch Named Fellow

■ Karl W. Deutsch, Professor of History and Political Science, has been named a fellow at the Center for Advanced Study in the Behavioral Sciences, Stanford, Calif., for the year 1956-1957. One of 49 fellows representing 29 universities or research institutions in this country and abroad, Dr. Deutsch will spend the year in advanced behavioral research at the Center. From funds provided by the Ford Foundation, the Center opened in 1954 as a new kind of institution for the study of human behavior.

Since he joined the M.I.T. Faculty 14 years ago, Dr. Deutsch has also served as chief of research sections of both the Office of Strategic Services and the State Department; as staff member of the secretariat of the United Nations Conference on International Organization at San Francisco; and as visiting professor, lecturer, or consultant at Williams College, Babson Institute of Business Administration, Columbia University, and Princeton University.

Dr. Deutsch has published numerous research articles and symposia in the fields of history, communications theory, and political science. He is the author of *Nationalism and Social Communication*.

New Corporation Members

■ James P. Baxter, 3d, President of Williams College, has been appointed a special term member of the M.I.T. Corporation, according to an announcement by James R. Killian, Jr., '26, Technology's President. In addition to the appointment of Dr. Baxter, three new alumni term members are: Dwight C. Arnold, '27, President of Arnold-Copeland Company, Inc., of Boston; Edward J. Hanley, '24, President of the Allegheny Ludlum Steel Corporation of Pittsburgh; and Augustus B. Kinzel, '21, Vice-president for Research, Union Carbide and Carbon Corporation, and President of the Union Carbide and Carbon Research Laboratories, Inc., of New York City.

Theodore T. Miller, '22, newly elected President of the M.I.T. Alumni Association, will be an ex-officio member of the Institute's Corporation for the next year. Mr. Miller is president of the Polymer Chemicals Division of W. R. Grace and Company, New York.

Dr. Baxter, winner of the 1947 Pulitzer Prize in History, was professor of history at Harvard University for 12 years prior to his appointment as president of Williams College in 1937. He received his bachelor's and master's degrees at Williams, and master's degree and doctorate at Harvard University, and is holder of 12 honorary degrees. Dr. Baxter was historian of the Office of Scientific Research and Development from 1943-1946, and is a member and trustee of many educational and scientific societies.

Mr. Arnold, retiring President of the M.I.T. Alumni Association, has also served as vice-president of the Association and member of its Executive Committee, Alumni Council, and Alumni Fund Board. He is a director of Stevens-Arnold, Inc., and a corpora-

tor of the Home Savings Bank and South Boston Savings Bank. He is a member of Brae Burn Country Club, 76 Club of Boston, Boston Madison Square Garden Club, Newcomen Society, and American Ordnance Association.

Mr. Hanley, who served on the Corporation Visiting Committee on the School of Industrial Management from 1954-1955, is a director of the Allegheny Ludlum Steel Corporation, Titanium Metals Corporation of America, Duquesne Light Company, Pennsylvania Economy League, and Allegheny Valley Hospital. He is a member of numerous business and engineering organizations, as well as the Duquesne Club, Oakmont Country Club, and Union League Club of New York.

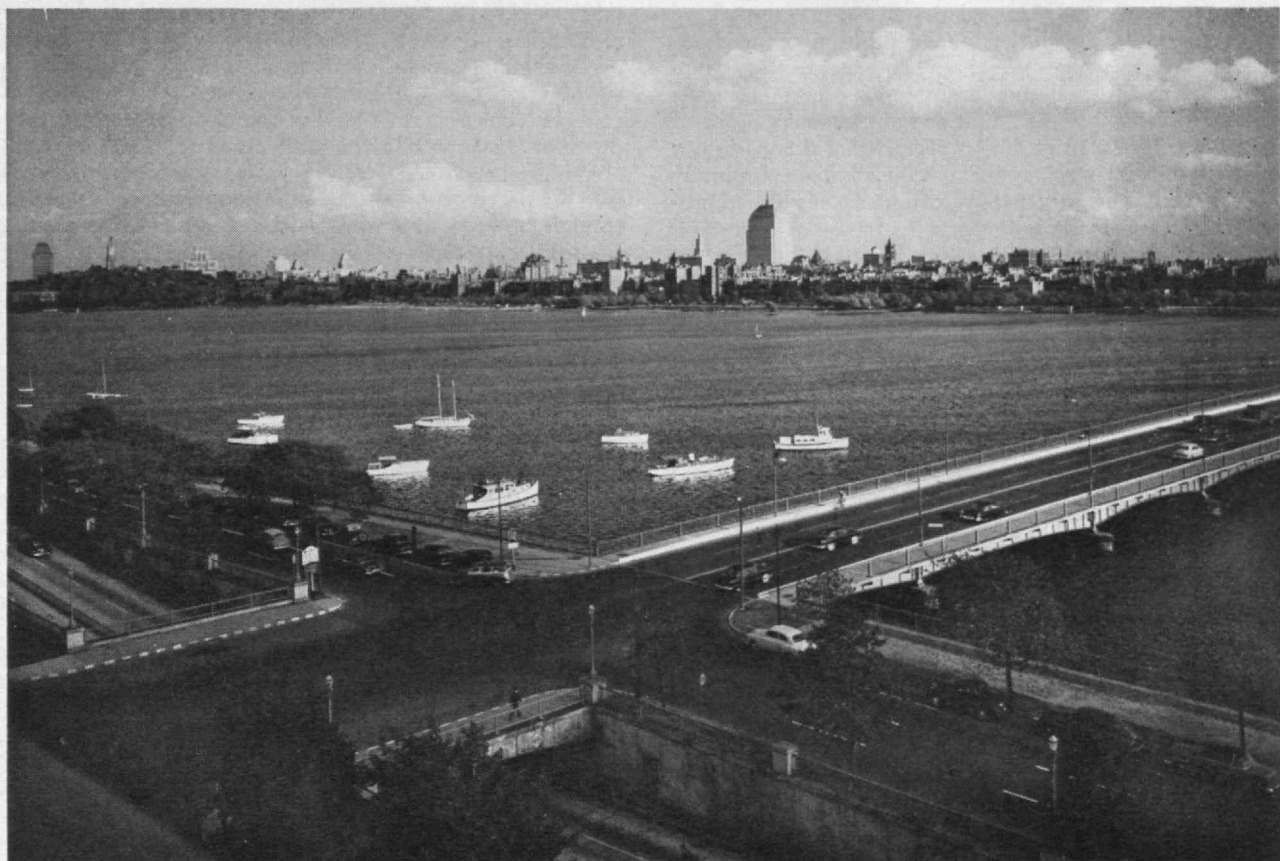
Dr. Kinzel is chief consultant in metallurgy to the Atomic Energy Commission's Los Alamos, Argonne, and Oak Ridge laboratories; a member of the Advisory Panel on General Sciences, Office of the Secretary of Defense; and chairman of the Advisory Committee to New York University's Institute of Mathematical Sciences. Formerly on M.I.T.'s Corporation Visiting Committee on the Department of Metallurgy, Dr. Kinzel is a director of the American Institute of Mining and Metallurgical Engineers. He is a member of the Metropolitan Museum of Art, Museum of Modern Art, Berkshire Museum, and Friends of Music (Lenox, Mass.).

Mr. Miller, long active in M.I.T. alumni affairs, has served as alumni member of the Corporation Visiting Committee on the Department of Modern Languages, member of the Alumni Association's Executive Committee and Alumni Council, and chairman of the Alumni Fund Board. He is also a director of the Boston Fund and the Middlesex Products Corporation.



Edwin Gray

The perennial popularity of Cape Cod summoned the Class of 1913 to the New Coonamesset Inn at Falmouth on Saturday, June 9, to celebrate its 43rd reunion. Happily pictured above are (First Row — left to right): Mrs. Burton L. Cushing, Mrs. Charles W. Brown, Mrs. Herbert G. Shaw, G. Philip Capen, Mrs. Bion L. Pierce, R. Charles Thompson, William R. Mattson, Mrs. Crocker, Zenas Crocker, Jr., Mrs. Rand, and Harold M. Rand. (Second row — left to right): Mrs. John B. Farwell, Miss Betsy Wood, Mrs. Charles H. Wood, Mrs. A. Laurence Brown, Mrs. Stuart J. Eynon, Mrs. Geoffrey M. Rollason, Mrs. Hilding N. Carlson, Mrs. G. Philip Capen, Miss Janet Mattson, Mrs. Paul V. Cogan, Andrew Vogel, Mrs. Brewster, and Ellis W. Brewster. (Third Row — left to right): Wm. Newsome Eichorn, Bion L. Pierce, John B. Farwell, Charles W. Gotherman, Stuart J. Eynon, Burton L. Cushing, A. Laurence Brown, Herbert G. Shaw, Geoffrey M. Rollason, Nathan H. Poor, 2d, Hilding N. Carlson, Kenneth A. Scott, Charles H. Wood, Edward H. Cameron, Paul V. Cogan, Eugene L. Macdonald, Lester G. Gustin, and Charles W. Brown.



M.I.T. Photo

View of the Charles River Basin and downtown Boston, as seen from the M.I.T. Graduate House, at the intersection of Massachusetts Avenue (Harvard Bridge) and Memorial Drive.

President's Annual Report

Need for M.I.T. to expand facilities and increase Faculty salaries is emphasized in the President's eighth annual report to the Corporation

by JAMES R. KILLIAN, JR.

In his eighth annual report to members of the M.I.T. Corporation on October 1, James R. Killian, Jr., '26, President of M.I.T., dealt ably and penetratingly with broad fundamental topics of education in the United States. The seriousness of providing adequate and first-class, educational opportunities and facilities for the nation's youth has already been brought to public attention through publication, last April, of the Report of the Committee for the White House Conference on Education, to which President Killian made signal contributions as an outstanding member of this important committee. In his report to the Corporation, Dr. Killian skillfully related the nation's educational problems with those M.I.T. must meet in continuing — and more importantly, in advancing — its leading position in the forefront of advanced scholarship.

Although Dr. Killian's report is too long to be reported in full here, a substantial part of his Presi-

dent's Report dealt superbly with an examination of "M.I.T.'s financial status in relation to this policy and to its growing responsibilities and opportunities." Of course Alumni will want to read this scintillating report in full. But The Review is proud and happy to present the following condensation to its readers as an advanced summary of a significant document.

In recognizing that "relative to many other less important fields of national expenditure, higher education has lost ground," Dr. Killian stated:

One of the principal reasons for this national decline in the "standard of living" of higher education is the deterioration of the real earnings of teachers. A recent report, "Teaching Salaries Then and Now," published by the Fund for the Advancement of Education shows that in the last 50 years salaries in the fields of education

have risen much less than salaries in other occupations, with the result that the economic position of teachers, especially top college teachers, has deteriorated. In a period when the real purchasing power of automobile workers rose 140 per cent, that of full professors dropped 2 per cent. The salaries of top professorial groups in our colleges and universities have deteriorated absolutely and relatively more than those of almost any other professional group in the nation.

This deterioration at the top is so great "that it affects the attractiveness of the academic career as compared to other professions and occupations" . . . with the result that "American society is deteriorating in the sector most critical for future progress and well-being. The quality of the future depends on education at all levels, and the quality of education depends on its top leadership. The best talent of the younger generation finds that education is not as highly valued by its seniors as law, medicine, advertising, or many technical skills." As a result of this economic deterioration of the teacher's position, "disaffection is being created at the most sensitive point in our society."

Many people, especially in industry, are unaware of the shockingly low salaries actually paid. A 1955 survey of 329 colleges and universities showed that the average salaries for professors ranged from \$4,602 in small colleges to \$7,850 in large universities.

The item of teachers' salaries is not the only item in the budget of higher education which has not kept pace with increases in our national standard of living, but it is the area of most significant and damaging failure. Of all the others (buildings, etc.), I mention only student aid and basic research. Scholarship funds now total between \$50 and \$75 million annually. Doubling this total in two to three years, quadrupling it in five would begin to bring our national student-aid resources to the level our growing needs require — especially if we are going to reduce the loss of the 100,000 or so top-quality high school graduates who do not have the means to go to college.

In our society, universities have been assigned the role of being our principal centers of basic research, in

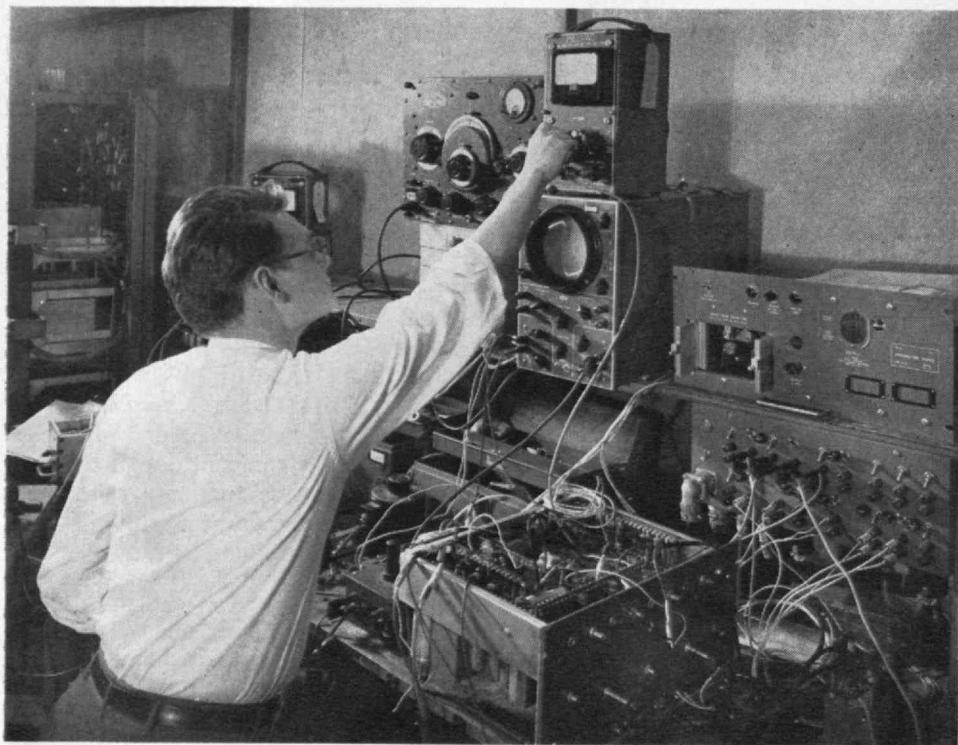
part because our future scientists must be cradled in the atmosphere of pure research and discovery. At present the overwhelming weight of national research expenditures is for applied research or development; basic research support comes harder, is by comparison meager, and provides inadequately for really uncommitted research.

While our college and university system shows vitality and progress today, it cannot long continue to do so if its personnel deteriorates. We need only recall the retrogression of American colleges in the first 40 years of the last century when the rapid multiplication of institutions over-reached the support available and a widespread mediocrity enveloped them. In the longer past we might well recall the somnolence of the European universities in the Sixteenth, Seventeenth, and Eighteenth Centuries. Cultural, social, and financial forces have from time to time diminished the vigor of universities; in the light of the past we cannot take for granted that our present-day system is immune to deterioration or that it does not require alert and vigorous efforts to keep it strong.

Raising Our Sights at M.I.T.

Coming now to the institution for which you and I are responsible, we find that M.I.T.'s economy reflects the national pattern of higher education. The increase in our resources in the past 10 years, magnificent as they have been, has not matched the combined requirements of inflation, increased enrollment (especially at the very expensive level of graduate study), and widened responsibilities arising out of M.I.T.'s position of national leadership. Our salary scale is too low (even though it falls in the top brackets for educational institutions), our student-aid funds are inadequate, and our Institute-controlled funds for basic research are too small.

The facts that M.I.T. stands fifth among the nation's colleges and universities in the market value of its invested funds, that from time to time it has received magnificent gifts, that its Alumni have built a flourishing Alumni Fund, and that in 1955-1956 it received \$10,387,000 in gifts, the largest in its history — all these make



The wide gamut of interests over which M.I.T. activities extend is indicated by the illustrations on this spread of pages. Since its formation, nearly a century ago, the Institute has been closely identified with technical studies, and has played a significant role in developing such new fields as servomechanisms and electronics, as illustrated in the photograph at the left. Since 1950, the Institute has, moreover, embarked on programs that also emphasize the religious, cultural, and gracious living phases of college life. Such emphasis in the Institute's program of developing the whole man is suggested in the photograph (shown on opposite page) of the M.I.T. Chapel and Bexley Hall, as seen from the rotunda of the Kresge Auditorium on the East Campus.

M.I.T. Photo

clear that M.I.T. is a fortunate institution in the financial support it has been receiving. We should not, however, let this encouraging progress create the misapprehension that we are a wealthy institution in terms of the demands upon us or that we are achieving the degree of support called for by our national responsibility. Occasionally someone proclaims that M.I.T. is a wealthy institution and therefore does not warrant contributions in the degree that many other institutions do. Such a conclusion does not withstand analysis and reflects a serious misapprehension about the character and responsibility of the Institute in the year 1956.

By what measure is M.I.T. a wealthy institution or by what standard does one appraise its wealth? The wealth of an institution is not measured in money but by its character, its excellence, its human resources, and its service. The money received by an institution or held in its endowment is simply a means for it to provide and augment its services to society.

The financial resources of an institution are meaningful only if we relate them to the opportunities to serve society. M.I.T. is certainly in a position today where it is steadily called upon to increase these services and where it has the demonstrated potential to do so — provided it has the means. The need for more first-rate scientists and engineers as well as the need for maintaining an advancing and flourishing scientific activity in the United States are examples of what I mean. The financial resources of an institution thus are meaningful only if we relate them to its opportunities and obligations. In these terms, M.I.T.'s resources are modest indeed; in fact, when we compare our potential for accomplishment with what we have the financial means to accomplish, we are poor indeed; and this has never been truer than in this period when the fields represented at the Institute are so vital to the safety, the welfare, and the prosperity of the nation.

Some Institutional Comparisons

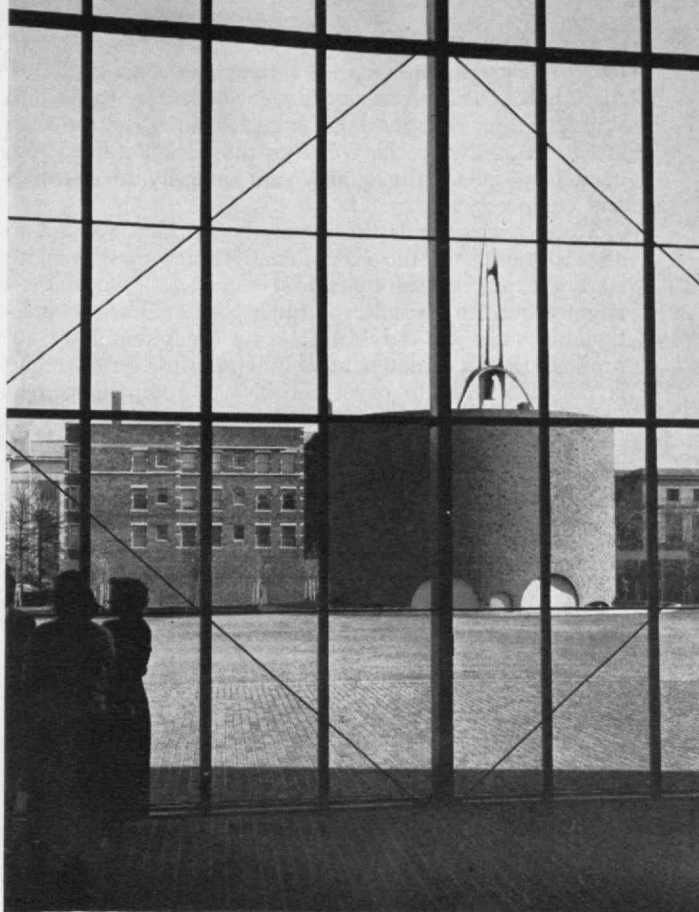
If we wish to talk in dollar comparisons, we can point to a number of institutions whose gifts are averaging substantially greater than M.I.T.'s and whose endowment per student is greater (the endowment per student at the California Institute of Technology is twice M.I.T.'s). If we compare our scholarship funds with those of other major institutions having our standards of admissions, we find ourselves frequently in an inferior position. If we compare our Faculty salaries with those received by men of comparable caliber in fields other than education, we cannot fail to conclude that M.I.T.'s funds are critically inadequate. Men of the type and quality represented by the M.I.T. Faculty are just those in great demand by industry.

Let us examine our gift position relative to other institutions, looking at the record for the past 35 years and at gifts received during 1954-1955 and 1955-1956:

Although information for the past year is not complete, I do know that a group of institutions which received \$59,671,000 in 1954-1955 benefited by \$106,025,000 in 1955-1956, or an increase of over 77 per cent. This compares with M.I.T.'s receipts of \$7,075,000 in 1954-1955 and \$10,387,000 in 1955-1956, an increase of 45 per cent. Two of these institutions during this past year each received gifts totaling over \$20,000,000.

Our Kind of Institution under Special Pressure

Along with other institutions of science and engineering, our salary problem is exceptionally acute. The shortage of scientists and engineers has pushed up the salaries



M.I.T. Photo

offered by industry and government with the result that the gap between academic salaries in these fields and salaries in industry is widening. It is a shocking fact that young men receiving their doctor's degrees in science and engineering frequently now obtain jobs paying higher salaries than the teachers who directed their graduate training. Widening, too, is the gap between salaries paid by educational institutions and the salaries paid by many other noneducational but nonprofit institutions and organizations. Certain of the foundations, research institutes, quasi-government organizations, and other institutions especially in the field of research have salary scales substantially higher than our academic salaries at M.I.T.

As a result of this condition we are squarely up against the possibility of the best minds in our engineering colleges, and to some extent in our science schools, being attracted away from teaching into industry or other fields. The possibility of this occurring is further increased by the strenuous efforts now being made to recruit scientists and engineers for urgent defense projects requiring many hundreds of professional workers.

As I pointed out in my report last year, "engineering education has been under pressure because its young and imaginative teachers — especially those in the advancing, growing fields of technology — are sought after by industry more than any other group in our educational institutions. If engineering education is to meet this challenge and prevent the spreading scarcity of quality in engineering schools that has weakened science teaching in the high schools, it must find ways to make engineering schools a more attractive environment for top-flight engineers."

If we permit this kind of deterioration to continue, the baneful effects for industry, for national security, and for the public welfare can become profoundly dangerous. Already we are engaged in an all-out technological race with the Russians. Already the Russians are training

more scientists and engineers than the United States. Already they are offering greater incentives, rewards, and status to their scientists and engineers in education than are we. Already we have before the nation a desperate need to augment the quality and quantity of scientists and engineers.

More distressing is the apparent fact that we fail to attract enough of the exceptionally able young men to start a career at institutes of technology, especially in engineering. As a result, the quality of staff has unquestionably suffered, and M.I.T. is no exception. I do not propose that we match industrial salaries, but the gap is now too wide to offset the special compensation of academic life.

I hold that these conditions of inadequate compensation of teachers, especially in science and engineering, and especially at M.I.T., cannot much longer be countenanced, not only because of their great inequity but because they can demean these great professional fields and weaken the nation at a point where today it most needs strength. I hold that no institution can be considered wealthy or even adequately financed which cannot pay adequate salaries to its faculty.

Our Priority Needs

Our most urgent needs fall in the following three categories, each of which has a bearing on the excellence of our people and on the future quality of staff and students.

1. To give the Institute an adequate salary scale, one that insures our recruiting and holding first-rate men, one that insures our maintaining and enhancing the quality of our education, M.I.T. needs an additional million dollars a year over and above the large additional amounts we have added to our salary commitments during the past two years. We need ultimately to achieve at least a 30 per cent increase in our salary scale. This will not bring us up to the level of industrial compensation.
2. We need an additional \$500,000 of income each year for student aid. We now lose too many outstanding students who want to come to M.I.T. but cannot do so because they lack funds.

3. We need additional funds to support basic research — funds which are under the sole control of the Institute and which can be used to support uncommitted research. At present the Institute's chief research support comes through "sponsored research." This support is invaluable, and much of it is provided in such a manner that it affords great freedom in supporting pure research. This form of outside support, however, needs to be supplemented by funds under the control of our administration and Faculty so that we can give more encouragement to disinterested curiosity and open-ended research — to people rather than projects and programs. The nation needs more of this kind of research. For this M.I.T. needs an additional \$500,000 a year of income.

There are still facility needs at the Institute that we must fulfill [improving and enlarging our student residence system and our classroom facilities, for example] if we are to hold this kind of position, but our first order of business is to underwrite the high caliber of our Faculty and students and their research.

Underwriting Our Future

In the light of the comparisons I have made and the major needs I have described, it seems clearly in order for us to set our sights higher than in recent years as we plan M.I.T.'s financial future.

We would not be discharging our responsibilities in managing this institution if we took any lesser view than it should be as good as, if not better than, any institution in its field or, more importantly, that we are realizing our full potential and meeting our growing educational and research responsibilities.

In a recent essay, Professor G. W. Pierson, Larned Professor of History at Yale University, draws this conclusion:

"... what one feels compelled to stress as emphatically as the basic idealism of the university movement will allow is the critical role played by money — or rather the lack of it. For the plain fact is that it was the absence of the cash ingredient, the lack of financial support from the American public, which
(Continued on page 54)



During President Killian's administration, much time and effort have been directed toward providing gracious living quarters for M.I.T. students who wish to live on the campus. Recently, a careful and exhaustive study of housing at M.I.T. was made by a Committee on Student Housing, of which Edwin D. Ryer, '20, was chairman. If the recommendations of this committee are followed, present dormitories would be remodeled and improved so that each housing unit has its own dining facilities, lounge, and Faculty residence; a new undergraduate dormitory would be built; and a Student Center would be erected on Massachusetts Avenue, opposite the Institute's main group of educational buildings. Cost of the program is estimated to be \$7,000,000.

M.I.T. Photo

To Begin to Live

Tragedy does not have to have an unhappy outcome, but in the company of educated men, to recognize that life is tragedy is to begin to live

by JOHN E. BURCHARD

My title comes from a half remembered and since unverified statement by the poet Yeats. As I recall it, this reads: "To recognize that life is tragedy is to begin to live." I shall talk about some of the elements of tragedy in one particular world, the world of the company of educated men.

This is not a world which is somber; indeed, it is a world of great gratifications. It contains comedy as well as tragedy and much of the time neither. But it does contain tragedy and to begin to recognize it is not inappropriate for you at this moment.

Our world, especially our Western world, particularly our American world, has the bad habit of debasing its verbal coinage. We use words with special meanings, first in metaphorical and soon in literal ways, so that their special meanings are twisted or destroyed. We overuse our superlatives so that our world is one in which it is hard to suggest that something is really large or really fine or actually unique. We treat the word "genius" lightly and apply it to the merely talented. And so we have done with the word "tragedy." We speak of tragic events which are merely unhappy events. They are not the same thing. Tragedy does not necessarily even have an unhappy outcome.

Different races have made the ultimate definition of tragedy in different terms. Most of you will recall, I hope, that the terms of Shakespeare were not those of Sophocles, will realize that the terms of today are likely to be still different. But it has always been clear that to rise to the dignity of tragedy the event, or better the sequence of events, the situation, or better the combination of situations, must have a certain scale—that, as the dictionary would remind you, tragedy must be serious, complete, and of a certain magnitude.

Such possibilities did rest in the dilemmas of Orestes, of Oedipus, of Othello, of Lear. The outcome need not always be unhappy but there is certain to be bitterness along the way. The death of Antigone was not necessarily tragic though the result for Cleon was clearly so; yet both endured the tragedy. The death of Socrates was tragedy for those who killed him, but not for Socrates. Orestes escaped the pursuit of the Angry Ones in the end; yet the pursuit had been there. So to talk as much of tragedy as I am going to do today does not imply that doom is inevitable but only that it is possible. It cannot fail to imply, however, that even if doom is averted there will nonetheless have been some tragedy in the process of averting it.

We are thus not to construe the proverb of Yeats in the sense of those personal bereavements, accidents, and frustrations that each of us must suffer on his way through life. As we come to understand these and bear with them, we do of course sharpen our character and our preparation for other and perhaps greater trials. But at this level prosperity may be more dangerous for us than adversity as many soothsayers have reminded us. Indeed, it has always been remarkable what fortitude people can show when personal adversity is all that is encountered. Many of us are more craven in anticipation of trouble than we are in its realization. Fewer still of us can stand success.

But I mean to propose a larger tragedy and one which must somehow be encountered by you; one which, if you encounter it bravely and wisely, will offer you the beginning of life as Yeats proposes it.

This is the tragedy of the educated man, or, better, the tragedy of the company of educated men. In absolute numbers this company is substantial; in proportion to the company of all men it is tiny. It is a large enough company so that its collective experience can reach to the heights or depths of tragedy; it is small enough so that its relations with the entire group of human beings can bring tragedy and disaster upon it; it is important enough, too, so that if these relations break asunder, disaster, if not tragedy, can also come to the noneducated group. This is the tragedy of which I wish to mention six aspects.

You do not yet quite belong to the company of educated men. But every action you have taken up to now indicates that you aspire to belong to it. You have gone through a considerable number of preliminaries. The door through which you pass tomorrow is one of the many doors along the corridors toward the company of the educated. You have passed several already. There are several more ahead of you.

Indeed, it is one of the puzzles of belonging to the company of educated men that you can never in an absolute sense be quite sure you do belong. For you as an individual there will always be another door, still closed, leading to still another, still more secret, room. If as an individual you ever cease to perceive that there is another such door, it is even probable that you will then cease to belong in the company of educated men.

There is also a puzzle for each of us in the choosing of the corridors and the doors. On the one hand we may choose doors which lead into ever larger and

larger rooms, where the scale of the chamber obscures the detail of the parts so that we perceive ever more dimly what is in each room we have entered; and there are doors which lead down narrower and narrower corridors into smaller and smaller rooms, more and more precise in their contents. How simple life would be if this last were the only right way, if in the final *naos* we could find the one simple and completely discernible thing which could be known as the ultimate truth or at least all we would ever need to know! But things do not work that way. There is no reason to think that the ultimate and the whole will lie in one single clear truth obtained by an assiduous and persistent walk through the ever-narrowing corridors of the single idea. By this process we do become expert in something. Unless we are reasonably expert in something we cannot expect to be maximum citizens of the modern world. But no subject we can elect to pursue to this degree of refinement will yield us all the ultimate truth nor will we find in the final *naos* much to help us with all the other problems of our lives or, more importantly, of the life of the world.

On the other hand if we choose just to move into the wider and wider rooms, there is a good chance that our thinking and our observations will become so vague that we cannot be said to have educated perceptions at all. Suddenly when we throw open the largest and most brilliantly decorated door of all, we may find not another chamber but rather that we have fallen outside the temple of the educated altogether.

It may be impossible for you to conjecture a physical performance which would let you walk through both the narrow and the wide corridors, those with the converging walls and those with the diverging; but in the metaphorical performance you are doomed to just such an effort. The two easy ways out are to specialize to the point where nobody else understands you and then the walls of the ultimate *naos* will be so close they stifle you, and the space they enclose so trivial that no one will miss you; or you may refuse to specialize at all and thus evaporate into the fog. Each of you will seek his own compromise in this difficult set of choices. It is *the first aspect* of the tragedy of the educated world that there is literally no one who can tell you until after the event, and perhaps not then, whether the choices you make are wise or foolish.

I was not speaking lightly when I said you were not yet really educated. But at some point and long before you have satisfied yourself that you belong in the company of educated men you will actually have been accepted into this company. That day is not yet, of course. The most the ceremonies of the next days proclaim is that by your actions thus far you have proved promising squires. Many vigils are before you and the guerdon of knighthood is not yet to be laid upon you.

You may never know when it has actually been placed on you, though you will probably be aware of the vigils. For you may become a member of the company of educated men without ever studying another course formally in your whole life; and you may work for and succeed in gaining a doctoral degree without

earning inclusion in the company of the educated. At the moment you probably have a clearer inkling of the kind of discipline that must be self-imposed if you seek the company of the educated through graduate study than if you seek it in life. But in fundamentals the discipline is exactly the same.

What this means for the scholar was eloquently defined by Mark van Doren in an address at the First Bicentennial Convocation of Columbia University. As I read this, try to think in other contexts, and of how what he is saying for the scholar is also true of the man of affairs or of any other member of the company of educated men. Of the scholar, van Doren said that he was always busy, "with scarcely the time to pause and tell us, should we ask, how much he knows; and more particularly, how much of what he knows.

"To the extent that he is a true scholar he will contemplate this question of the what, and seriously ask it of himself. Is he studying the right thing? — which means, for true scholars, the most difficult, the most hidden, the most abstract, the most inaccessible thing. Has he been content thus far with fields of ignorance that others have defined? Has he discovered any for himself? And if he has, is it the farthest field, beyond whose fences, conceivably, the simple truth sits looking at itself? Often this farthest field seems nearest to the uninitiated mind, which asks elementary questions about it: What is it, after all? Why are you studying it? What would it mean to know what you say you want to know? Is it important? What difference will it make? Or, in a more friendly voice, even an eager one: What is electricity? What is life? What is poetry? Can history be true, and if so, what history is most true? Is there such a thing as human nature, and does it grow? What is government? What is law? What is money? What are the stars, and why is there so much space between them? Where is God? And if man knew everything, would he be God?"*

Many of you, indeed perhaps most of you, are not even going to try to be scholars in this high sense; some of you will even secede altogether from the company of educated men. But if you are to remain in that company it is important that you ponder such matters even if your task in life may seem to be utterly pragmatic and possibly even routine and pedestrian. For it is *the second aspect* of the tragedy of the company of educated men that so many who started to be in that company, and who still deem themselves to be so, do not really understand that scholars must think in these terms, that they must continue to question even those truths held by their fellows to be most self-evident, in fact, that these are perhaps the truths that need most to be questioned. Thus the company of educated men is often divided and the scholarly group is left unsupported in time of trial by many of the once educated. You will be able to remember enough examples from recent American history so that I need not weigh this point down with detail. It is particularly important then for those of you, probably the most of you, who will move to affairs and practical matters never to forget this. Through your work you will do much good in the world. But you must always remember what belonging to the com-

*Mark van Doren, "The Kinds of Knowledge," *The American Scholar*, 24:412 (Autumn, 1955, No. 4).



M.I.T. Photo

As the center of the Institute's vast library system, and the focal point of many of its cultural activities, the Charles Hayden Memorial Library makes its own contributions to the development, at M.I.T., of the company of educated men.

pany of educated men implies even for those who in their daily life seem formally to have abandoned it but really have not. They will ask comparable questions about their job and their other activities and they will support with steadfast understanding the company of educated men against the misunderstandings of the rest of the world.

For it is *the third aspect* of the tragedy of the company of educated men that it is not really loved or admired by the world around it. Learning is not admired for its own sake in very many quarters, and never has been. Scientists and technologists admittedly are in short supply but not because the world as a whole is anxious that there should be more science. The world as a whole is afraid, and *does* covet the offsetting protections that it entrusts to military technology; and this is the main reason you

are so much wanted. At a lower level of intensity, but still seriously, it covets the labor-saving or amusing devices that come from technology so that for this too you are indispensable and sought out. But it does not on the whole admire you just because you have been trained to seek the truth wherever this may lead you, however much it may challenge long-cherished myths. Indeed, it is this potential in you which it fears.

The greatest boon you and your technological colleagues could contribute to the world (and it is not impossible that you can contribute it) is a development in which there need no longer be bickering for a distribution of an inadequate food supply or an inadequate supply of various mineral resources or of anything else which makes it possible to provide

(Continued on page 40)

Engineers, Executives, and Education

Drawing increasingly on engineers for its managerial talent, industry has a stake in their training for executive posts

by JOHN B. RAE

DURING the last few years a considerable amount of research from both academic and business sources has been poured into the problem of corporate management and the characteristics of the American business executive. One of the most striking features to emerge is the increasing extent to which engineers are to be found in the ranks of management. Studies of M.I.T. graduates, for example, show that at least a fifth of all Institute Alumni are in executive positions, as against half that proportion 40 years ago. (I am using the term executive here to refer to policy-making posts, and not to routine administrative and supervisory functions.) With the men who have been out of college 10 years or more the ratio rises sharply, running as high as 50 per cent of the older Alumni. A similar survey of graduates of Stevens Institute of Technology shows an almost identical pattern. The evidence indicates very clearly that on the day he receives his degree an engineering graduate has one chance in five of becoming an executive: if he returns for his twenty-fifth reunion, the odds are one in two that he will be an executive. On the other side of the picture, approximately 30 per cent of the heads of major industrial corporations in 1950 were trained as engineers.

For both industry and education these figures have important implications. The first and elemental fact of the situation is that industry is drawing heavily on the engineering profession for managerial talent and this process gives every indication of continuing with unabated tempo. The nature of modern industry makes competent technological representation at or near the top level of management indispensable. In an interview published in the *General Motors Engineering Journal* for February, 1956, Alfred P. Sloan, Jr., '95, pointed out that the engineer had a vital contribution to make to management techniques, in that his outlook and abilities were essential to the direction of the processes of mass production.

Yet the fact that engineers are needed as executives does not mean that they are automatically qualified for the role. Coming from a member of the M.I.T. staff, this statement may be considered subversive. The editor and I will undoubtedly receive some indignant letters reminding us of figures like Mr. Sloan, Gerard Swope, '95, Paul W. Litchfield, '96, and others who have had brilliant careers as engineer-executives. Yet the statement has to stand. Despite the long list of names that could be added to these just mentioned (Ralph Budd, for instance, to get outside the M.I.T. circle), a strong case can be made for saying

that these men are exceptional figures and not necessarily typical of the engineer in management. We have on this point testimony from another successful engineer-executive, William R. Given, Jr., '08, of the American Brake Shoe Company. Writing in the *Harvard Business Review* for January-February, 1955, he reports that engineers as a group show two serious weaknesses when they are taken into management. First, they do not deal well with intangibles, particularly human relations both within the business and with customers. Second, they are likely to be slow about making decisions, largely because their proclivity is to test and experiment until they are completely satisfied with the results.

We are therefore faced with the dilemma that engineers are needed in management but are likely to lack certain essential qualifications for it. This deficiency manifestly should be remedied, but whose responsibility is it to do so — industry's or the colleges'? This, of course, is a foolish question. The responsibility rests upon both, and the essential problem is to determine how it should be apportioned between them.

One complicating factor is that industry hires engineers in the first instance because it wants their technological skill rather than because they represent future executive material. At industrial conferences I have attended I have heard my colleagues from the liberal arts colleges complain vigorously about the discrepancy between the statements of corporate executives and the recruitment practices of personnel departments. Heads of business concerns emphasize the desirability of breadth of training and outlook in management: the men who visit the campuses, however, as a rule are looking for students with specialized training to fill specific job requirements. There is an apparent contradiction here, but its solution is far from easy. Industry has to give priority to its immediate needs: it can hardly be expected to pass over a promising engineer simply because he might not be a good prospect for the presidency of the company 30 years hence. If the result is an overemphasis on the specialist, the academic world is not in the best possible position to criticize business on this score.

What both education and industry need to do is pool their ideas and resources for the purpose of developing in these specialists the qualities that will make them good executive material. Suppose we look first at what the engineering colleges might do. Most of them already offer courses leading to degrees in business administration or management, but these



M.I.T. Photo

Entrance to the Sloan Building which houses the Institute's School of Industrial Management and Faculty Club

courses cannot by themselves fill the requirements of industry for technically trained executives. For one thing, industry is not going to limit its search for talent of this kind to the men who had made up their minds in college to seek careers in management; industry, indeed, does not. The figures for M.I.T. Alumni show that Course XV (Business and Engineering Administration) graduates have some advantage in moving into management in the early stage of their careers but are not appreciably ahead of graduates of other courses in getting to the top of the executive ladder.

Should we, then, require management training as part of every engineering curriculum? The answer to this one is a categorical "No." There are only two ways in which it could be done. One would be to take some of the time presently allocated to general education, but this step seems poorly designed to produce executives with the breadth of view that industry says it wants. It also has the unfortunate effect of

imposing another requirement on engineering education at a time when it is trying earnestly to free itself from excessive rigidity. The other possibility is to cut into the professional program, but this alternative is even worse.

The primary function of an engineering college, after all, is to train engineers, a point frequently disregarded in discussions of educational policy. The fact that many of these engineers are going to become executives is interesting and important, but should not be allowed to divert engineering education from its main task. Such a diversion, indeed, would defeat the very purpose we are trying to achieve. At the risk of being repetitious, it needs to be emphasized that the rise of engineering participation in management is directly due to the growing need of industry for executives with technological competence and understanding. Making poorer engineers is the wrong way to get better executives. If engineering colleges will incorporate in their under-

graduate curricula as much liberal education as is consistent with maintaining the highest possible standards of professional training, they will have done all that can reasonably be asked of them.

Since, therefore, the amount of specific training in management that can or should be given to undergraduate engineering students is limited, the prospect of doing something at the graduate level needs to be explored. Again, much is already being done, with the Institute's School of Industrial Management as a conspicuous example of a graduate program aimed directly at filling industry's need for executives with technological proficiency. The combination of an undergraduate course in engineering with a graduate school of business has been a fairly common one. It is, however, impossible to come to any accurate conclusion about the effectiveness of this type of combination, both because few graduate schools of business have been operating long enough for any significant number of their alumni to have reached top-ranking executive positions and because men with engineering training have constituted a minority of all business school graduates. In any case, this avenue to management is of limited utility to engineers, since many of them are not going to discover an interest in, or aptitude for, management until after they have been in industry for some time. More important, the tendency of engineering education itself to stretch out into the graduate years offers severe competition for the time of engineering students. In fact, while the present demand for engineers lasts — and it is likely to last for a long time — the incentive for an engineering student to remain in his professional field for graduate work is going to be very strong.

It seems quite obvious, then, that most of the training process involved in converting engineers into executives has to take place in industry rather than in the colleges. Of this fact industry is becoming increasingly aware, because it is one facet of an intensifying search for capable executives. The shortage of engineers in the United States has been very well publicized during the last few years. Less attention has been given to our equally acute shortage of managerial talent, but large corporations in particular have been deeply concerned with the problem of maintaining a flow of qualified replacements for their top-flight executives, and have concluded that some sort of formal training program is necessary.

The reason is quite simple. In the interview previously referred to, Mr. Sloan went on to say:

"Industrial management realizes today, as never before, that however competent it may be, it can no longer confine itself directly to the production of goods and services. It must accept responsibility for the impact of its decisions, at the policy level, upon society as a whole since these decisions affect the economic progress of the community and its stability. In other words, it must accept its share of responsibility for human progress and make its decisions in terms of industrial statesmanship."

This is far too grave a responsibility for the men who are to exercise it to be chosen by hit-or-miss methods. It can be hoped that natural business leaders will continue to emerge, but there is too much at stake to leave the process entirely to chance. Appre-

ciation of this fact has produced in industry an impressive variety of programs for identifying and training executive talent. As one example, the *Atlantic Monthly* for March, 1956, has an article entitled "Management in Search of Men," by David A. Shepard, '26, in which he describes the system of executive development which the Standard Oil Company (New Jersey) has been using for 10 years, whereby promising young men are moved about in the organization and perhaps sent for additional management training to one of the 20-odd universities which now offer special courses for this purpose. In addition Jersey Standard and several other companies have combined in a long-range research project called E.I.M.T. (Early Identification of Management Potential).

Programs of this type open promising avenues for co-operation between education and industry. Admittedly the potential executive receives most of his training on the job, but there are objections to having him receive all of it in this way. A strictly in-company training program can produce a species of introversion, whereby a man's outlook becomes limited to the problems of his own firm. In addition, if the individual in question has begun his career as a specialist, such as an engineer, he may need more systematic training in areas outside his particular field. One solution is to do as some companies have done and organize seminars in broad problems of management, usually conducted by senior executives. Serious consideration needs to be given to the feasibility of diversifying these sessions by inviting outside talent, especially from the colleges and universities, to assist in conducting them. Teaching, like management, is most effective when it is done by trained personnel. Such an arrangement calls for study and careful handling on both sides, but it is not impossible.

More elaborate co-operative relationships are becoming available in the management training or executive development programs that are being offered by various graduate schools of business. Basically, these are planned for men who are considered by their companies to be sufficiently promising to be detached for formal advanced study. Most are short, intensive summer sessions, but a few have been undertaken on a more ambitious scale. M.I.T.'s Sloan Fellowships run for a full year: the Harvard Business School has two programs: Advanced Management, a 12-week session for senior executives, and Middle Management, a variation of the regular M.B.A. course for men with five to 10 years of business experience.

These programs are all too recent for any attempt to be made at evaluating them. Indeed, while business concerns are showing an increasing interest in this method of management training, there are still a good many, including some of the leading industrial corporations, that are not completely sold on the idea of sending their budding executives back to school. Much, of course, will depend on whether the participants do appear to be emerging with better qualifications for the exercise of top-level managerial responsibilities. For the achievement of this objective, two things seem to be fundamental: First, industry has to select and send the best it has — in other

(Concluded on page 66)

BUSINESS IN MOTION

To our Colleagues in American Business . . .

"Printed circuits!" "Printed circuits!" You hear it on all sides today. And well you might. For printed circuits have so many advantages. They have compactness as compared to conventional wiring and compactness that makes possible better assembly arrangements and techniques. Numerous, time-consuming hand operations are eliminated, there are fewer rejects, shorter, less intricate assembly lines, and fewer soldering operations, as with printed circuits a single dip-soldering operation can solder all joints at once.

Revere, naturally, has been interested in printed circuits from their very inception. So Revere Research Engineers immediately went to work to perfect a copper that would meet all of the rigid requirements encountered in manufacturing printed circuits as well as those necessary to their efficient operation. Accordingly, they set up these rigid specification standards: there can be no peaks or valleys. Surface must be hard and of uniform density through and through and side to side to maintain positive conductivity throughout the circuit. Also, a hard surface permits resist to clean off easily as there are no pores to hold resist and cause trouble later when soldering. Even the most closely spaced and finest lines encountered in a printed circuit must have a sharp definition of the edges and be freer from pits, pinholes and imperfections.

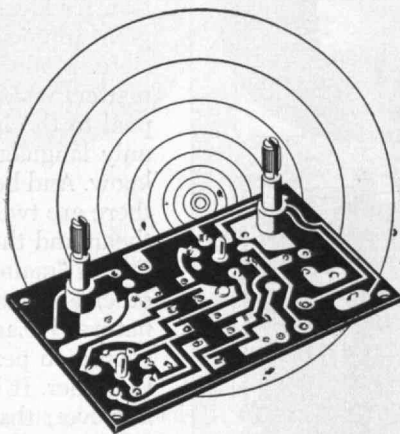
Also, the copper must be free from oxidation as it comes from the mill and without lead inclusions,

present a sufficiently clean surface so that fluxes will wet readily and when automatically soldered the solder coat will be uniform every time . . . free of skips or bald spots. Copper-to-laminate bond strength must be uniform and adequate. Revere Rolled Copper also shall exceed standard specifications as well as meet ASTM B5 specification for purity with a 99.9% minimum rating.

Those were the rigid standards set up by Revere Research Engineers and those are the standards met by the Revere Rolled Copper now available in unlimited quantities. Said one laminator, after using Revere Rolled Copper, "It enables us to give our customers superior copper-clad laminates that present a smoother surface (freer from pits, pinholes, and imperfections) . . . more uniform thickness without sacrifice of conductivity. The result has been, consistently satisfactory etching at better production rates."

And, because you can get all the advantages of Revere Rolled Copper at no extra cost it will pay you to make absolutely certain that you specify Revere Rolled Copper for your printed circuits when you order your boards from your laminator.

But, whether you order Rolled Copper from Revere or other materials furnished you by other manufacturers . . . the best results and the greatest satisfaction are obtained only when you take your suppliers into your confidence.



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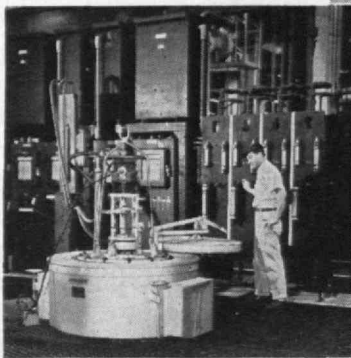
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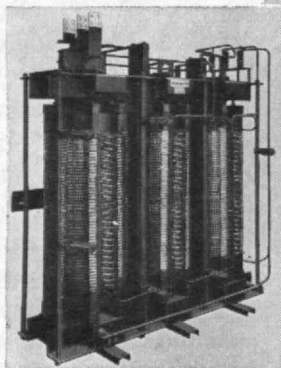
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Dry Type
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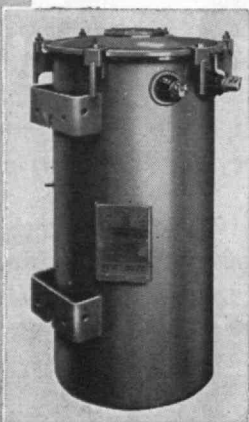
TRANSFORMERS

2 VA to
2000 KVA



Static Type

CONSTANT CURRENT REGULATORS



HEVI DUTY ELECTRIC COMPANY

MILWAUKEE 1, WISCONSIN

Harold E. Koch, '22, President

Elton E. Staples, '26, Exec. Vice President

Chester Meyer, '36, Works Manager

TO BEGIN TO LIVE

(Continued from page 35)

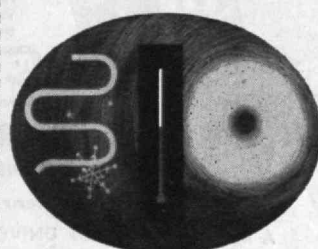
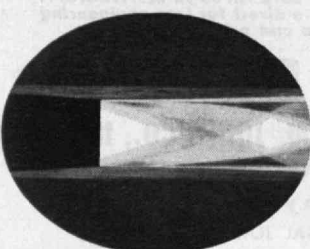
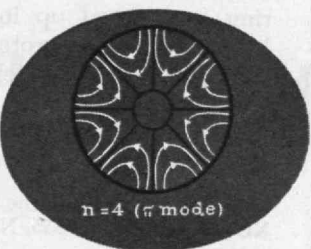
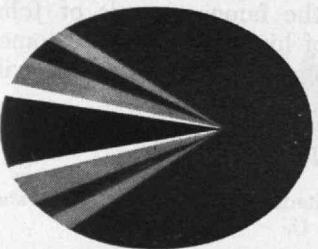
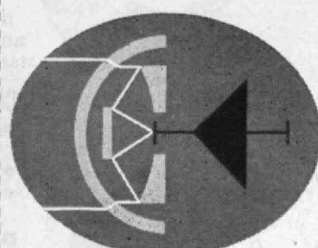
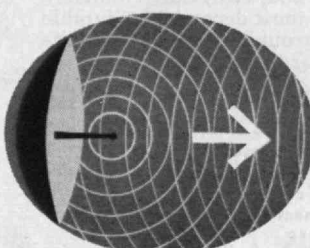
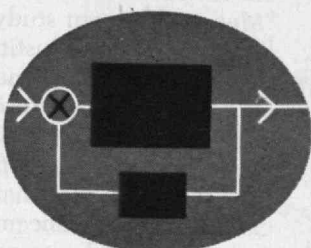
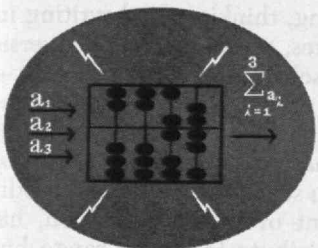
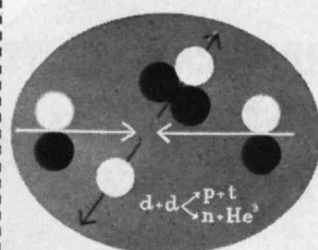
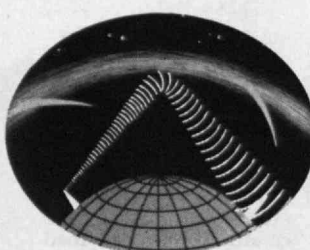
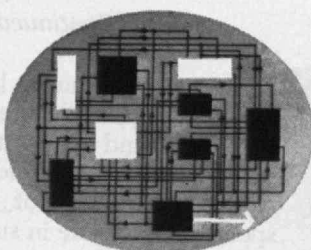
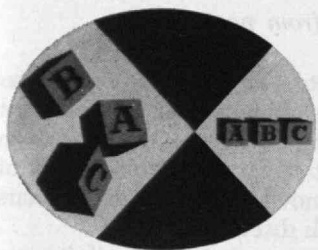
health and a high level of physical welfare for everyone in the world, not just for a small portion of the population of the world living mostly in the Western Hemisphere. It is not certain that this provision together with that leisure which can also permit a higher development of other elements of culture will necessarily lead to the abolition of the stupidity of war; but it is probably a necessary condition for such an abolition. Save for the virtue of the search for absolute truth, which is a virtue that is somewhat mystical and becomes more an article of faith than of proof, this is the largest virtue you can bring to the world; and many of your elder colleagues think it is not impossible that you should bring it. Yet this is not the reason everybody worries about the fact that you are in short supply.

Part of the fault for this misunderstanding no doubt lies with the company of educated men; perhaps the greater part of the fault. We all have been guilty, partly as a matter of personal convenience and partly as a matter of self-esteem, of marking ourselves off from the crowd, of adopting, each for his own field, its own esoteric language. It is hard enough to transfer ideas from one field to another at best; some great physicists contend that today it may be impossible. Modern physics is, for example, dealing with matters which can in no way be explained by an appeal to the language of common sense which is the only language that the common man can expect to know. And besides, as Lewis Mumford has suggested, there are two great facets to a man's life, the Promethean and the Orphic, the technical and the artistic. One is "mainly a struggle with the environment, the other an ideal expression and enjoyment of his own nature."† Each man perhaps has some of each side; each man perhaps has a greater emphasis on one or the other. It has all too often been the sad spectacle, however, that those who were mostly Orphic men felt compelled to assert that Promethean men were of lesser clay while Promethean men on the other hand, well regarded as they were by a pragmatic society, had felt driven to try either to make Orphic men seem absurd or else to pretend with equal folly that Promethean activities were in fact actually Orphic too. There is something aesthetic in the struggle with the physical environment and there is something practical in the effort to make an ideal expression of man's nature, but nothing is gained by the effort of the lovers of one or the other activity to assume for it a higher or more complete place than it needs or deserves. In fact, these quarrels which have been going on for a long time now have simply led general man, or what Ortega y Gasset called mass man, into an innate distrust of both which he shows overtly to the useless Orpheus and only in times of witch-hunts to the useful Prometheus.

In a limited sense there is probably no such thing any more as a unity even of science; it is laboring hard, though many attempt the labor, to try to estab-

(Continued on page 42)

†Lewis Mumford, *The Transformations of Man*, page 27 (New York: Harper and Brothers, 1956).



Variety of Technical Fields

These illustrations are symbolic of some of the scientific and engineering fields of endeavor which are essential ingredients in the broad range of technical programs that are in progress at The Ramo-Wooldridge Corporation. Illustrated are: Information Theory, Systems Analysis, Communications, Nuclear Physics, Electronic Computers, Servomechanisms, Electromagnetic Propagation, Infrared, Aerodynamics, Micro-waves, Propulsion, and Thermodynamics.

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TO BEGIN TO LIVE (Continued from page 40)

lish an absolute unity between the creative process involved, say, in the development of a new concept in physics and the writing of a great epic or even sonnet; it becomes almost semantic gabble to talk of an absolute unity of knowledge though scholars spend a lot of time in such discussions.

This unity cannot now rest on details, if it ever could. The degree to which it exists has not been better stated than by James B. Conant when he said, "Men and women studying, thinking, and writing in libraries, research institutes, museums, and universities, as well as the lone scholar, writer, and artist — all have one attribute in common: *They are all engaged in a creative activity whose produce each one hopes will have significance for a long period of time.* To the degree that a scientist or scholar is dedicated to the advancement of learning as such, his ambition must be to contribute to a long-range human enterprise, not to an immediate undertaking. Indeed, the ambition of all those to whom I am referring is summed up in the famous words of John Milton, when he wrote of his desire 'to leave something so written to aftertimes as they should not willingly let it die.'"[†]

(Continued on page 44)

[†]James B. Conant, "The Citadel of Learning," *Yale Review*, XLV:51 (Autumn, 1955, No. 1).

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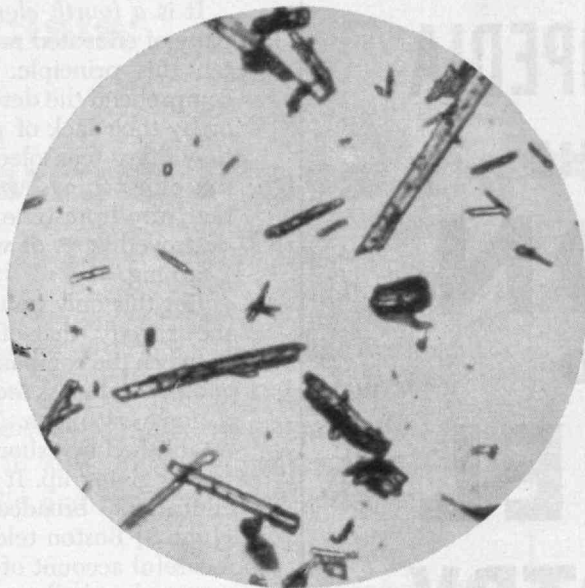
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TO BEGIN TO LIVE
 (Continued from page 42)

It is a *fourth element* of the tragedy of the company of educated men that they have so often forgotten this principle. Harassed by their inability to comprehend the details of another kind of scholarship or by their lack of personal interest in these details, they have consoled themselves by declaring that the other things were unimportant. It has been in that way from time to time that the mass men have destroyed parts of what Conant calls "the Citadel of Learning."

But this only points the way to the *next aspect* of the tragedy, that of the difficulty of communication between the company of educated men and the larger company of mass men who do not seek this communication very much. The communication will not be established by exhortation. Its lack will not be atoned for by giving up. It cannot rely in any large way on educational broadcasting or television. Last Sunday [June 3] Boston television viewers were deprived of a careful account of the St. Lawrence Waterway because a baseball game dragged on. But most of them were more content with what they saw, and would have been bored and angry with the alternative. Yet it will hardly serve to have an elite of the knowing who have managed in one way or another to do more than tolerate each other and a mass of the unknowing who have their own different code and often their

(Continued on page 46)

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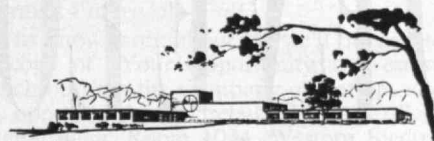
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TO BEGIN TO LIVE

(Continued from page 44)

scorn and fear of what can perhaps actually be called a modern sacerdotal group. The problem of how to build a bridge across this gulf is perplexing. Your predecessors have watched the chasm widen, not narrow, while at the same time their efforts to bridge it have been essentially failures. This is the fifth aspect of tragedy of the company to which you have aspired. Most of the time most of us in this company try to forget the chasm by working on things that are familiar; sometimes when our colleagues try more they are scolded by their fellows for abandoning the machine upon which they were skilled workmen and trying to build communication bridges, an art in which no one is skilled. Then when a crisis arises, and we have seen several, we agitate and scream and sometimes almost by sheer force of words throw temporary stagings across. But we have done nothing to produce permanence. There is little reason, for example, why the general public should believe us when we insist that it is for human good, even for the national good, that scholars and scholarly ideas should circulate freely in the world if we have not succeeded in explaining to them *why* this is so; and the *why* has to consist of more than an assertion by us that it is so; it probably requires some little experience with actual situations. This we have not found out how to provide.

(Continued on page 48)

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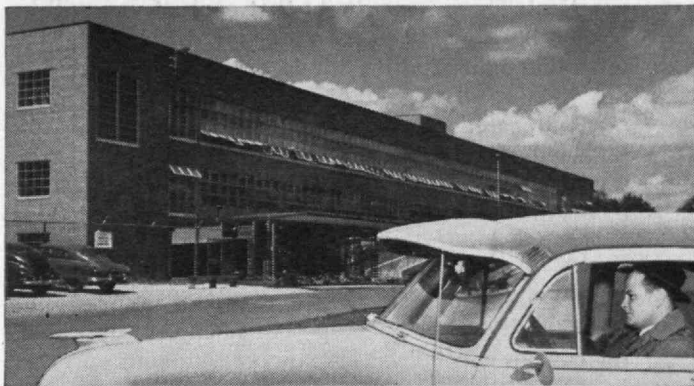
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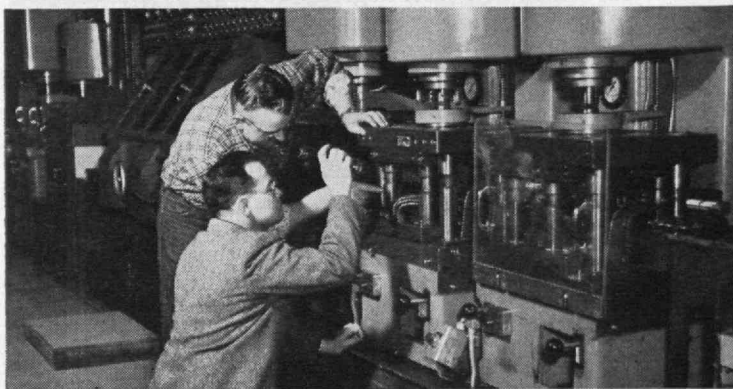
Western Electric development engineer



Dick Foster joined Western Electric, the manufacturing and supply unit of the Bell System, in February 1952, shortly after earning his B. S. in mechanical engineering at the University of Illinois. As a development engineer on a new automation process Dick first worked at the Hawthorne Works in Chicago. Later, he moved to the Montgomery plant at Aurora, Illinois where he is pictured above driving into the parking area.



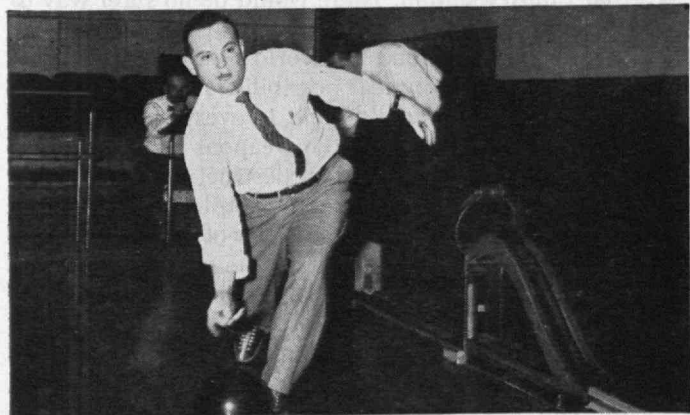
Dick's day may begin in one of several ways; an informal office chat with his boss, a department "brain session" to tackle a particularly tough engineering problem (above); working with skilled machine builders in the mechanical development laboratory; or "on the line" (below) where he checks performance and quality and looks for new ways to do things.



Here Dick and a set-up man check over the automatic production line used to manufacture a wire spring relay part for complex telephone switching equipment. This automatic line carries a component of the relay on a reciprocating conveyor through as many as nine different and very precise operations—such as percussive welding in which small block contacts of palladium are attached to the tips of wires to within a tolerance of $\pm .002$ ".



Examining the plastic molded "comb" components of the wire spring relay Dick recalls his early work when he was involved in working-up forming and coining tools for the pilot model of the automation line for fabrication of wire spring sub-assemblies for relays. At present he is associated with the expansion of these automation lines at the Montgomery Plant.



Dick finds time for many Western Electric employee activities. Here he is scoring up a spare while tuning up for the engineers' bowling league. He is active also in the golf club, camera club, and a professional engineering society. Dick, an Army veteran, keeps bachelor quarters in suburban Chicago where he is able to enjoy the outdoor life as well as the advantages of the city.

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It is easy enough to win rewards of cash and of comfortable physical life and even of some public approval by never sticking your neck out, by adhering to your specialized last, by holding your curiosity in check, most of all by keeping it steadfastly focused on a narrow and relatively familiar objective. You can even feel smug about this and join the wolf pack of those who snarl at the heels of any scholar who wanders too far outside the certificated training for which he boasts degrees. You can be in this sense a useful citizen, a good man by modest definition, perhaps even a happy man. But you will not be a hero.

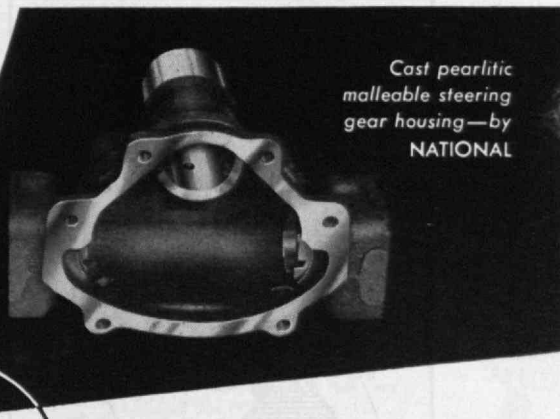
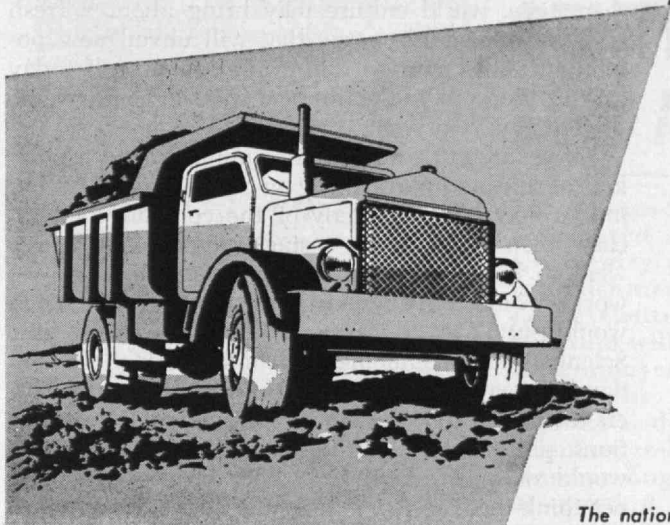
You will not have grandeur, you will not be a hero, and the world needs heroes more than it needs useful hands. The way of the hero in these matters is hard, tedious, despairing, risky. You may turn out not a hero but a fool. You may turn out not useful but useless. You will be criticized, stoned verbally, and you may not even be happy in your effort. But there is just a chance that you may be one of those who can help to save the company of educated men from a destruction which is more threatening than anyone would like to believe. It is always threatening, of course. There have been Dark Ages before, and there can be again.

And this brings me to the final part of the tragedy that I must mention. There would be no surer way to a Dark Ages than a resumption of mass hostilities such as have plagued the world now for nearly half a century. The physical possibilities in this are well enough known, I would hope, to everyone and surely they are to you. Beyond the weapons of physical destruction there loom those of destruction of the mind. The Dark Ages are even more implicit in the latter than in the former though they are of course potential in either. You need as part of the company of educated men to permit yourself no relaxation in your struggle against such an outcome. You can help as citizens, of course, in keeping your own nation on a prudent path. You can continuously ask what the best ways are to keep other nations on prudent paths. You can continuously wonder whether the proportions of money and attention your country spends on weapons on the one hand and on aid and international education and understanding on the other are realistic proportions. You can work for the idyllic day which is potential in the applications of modern science in

(Continued on page 50)

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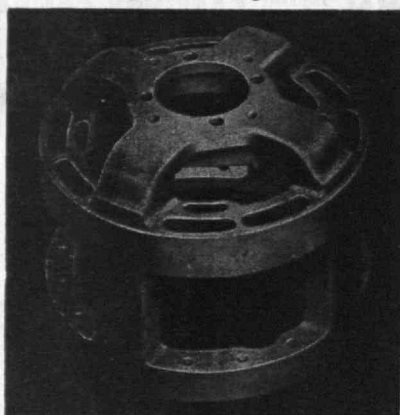
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TO BEGIN TO LIVE

(Continued from page 48)

which at least the economic reasons for war have become invalid. We have no reason to be certain that Lewis Mumford was wrong when he depicted his One World Man, the successor to Archaic Man, Civilized Man, Axial Man, Mechanized Man, a man on whom new forms "dimly emerging in man's unconscious . . . begin to beckon him and hold before him the promise of creativity: a life that will not be at the mercy of chance or fettered to irrelevant necessities. . . ."

"In carrying man's self-transformation to this further stage, world culture may bring about a fresh release of spiritual energy that will unveil new potentialities, no more visible in the human self today than radium was in the physical world a century ago, though always present. . . ."

Yet we are far from this millennium on the technological side, and particularly on the spiritual. It is *the final aspect* of the tragedy of the company of educated men that it is not a single company. If a war were to begin tomorrow the educated men of the world would be aligned in two camps and each would put all its education at the service of its side. Scientists and technologists would work night and day for weapons; psychologists and poets and painters for persuasions; historians for immediate justifications; philosophers for ultimate justifications; priests would supplicate God from both hordes. We must not think that there would not be educated men and devout men on both sides. The plain fact is, then, that educated men have themselves not found an answer to this major question; and in time of crisis they will, as of now, all behave like mass men.

These are the tragic questions you have brought upon yourselves by electing to join the company of educated men; you will have difficulty all your lives in developing the right balance between your specialized and your general competence and the amount of time you must devote to each; you will perhaps betray the company you once belonged to by not understanding and supporting them in crisis, or if you have remained in the company you will perhaps be betrayed; you will not be loved or admired by society in general for anything except your usefulness as defined by that society, which will not be the definition

(Concluded on page 52)

§Lewis Mumford, *op. cit.*, page 249.

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ATOMIC BOMBS DROP ON JA



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Santa Fe learned officially today of the reverberating announcement of the bomb, with 2,000 times the power of the atom, dropped on Germany, also lifted the community on the Pajarito Plateau, Santa Fe has ignored, except in whispers, the atom.

GRADUATE RESIDENCE CENTER ESTABLISHED AT LOS ALAMOS

Los Alamos Scientific Laboratory has completed arrangements with the University of New Mexico for the establishment of a Graduate Residence Center at Los Alamos. This program will provide the opportunity for employees and residents to meet all of the requirements for the master's degree in the physical sciences and engineering (including Nuclear Engineering) by attendance at evening classes. Some of these courses are taught by Laboratory personnel outstanding in their fields.

In addition, there are extensive course offerings in the undergraduate and technician training fields for those wishing to pursue academic training related to their jobs or for their own development.

Complete information about career opportunities and the academic training programs can be had by writing,

Director of Scientific Personnel
Division 1320

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Bradbury Outlines

Here's the list of a statement made today by Dr. Norris Bradbury, Director of the Los Alamos Scientific Laboratory, in reply to questions of editorial staff of the Santa Fe News.

Dr. Bradbury said that the Los Alamos Scientific Laboratory has been working for some time on the development of a new type of atomic bomb, one that would be much more powerful than the one that was dropped on Nagasaki.

He said that the laboratory has been working on this project since the beginning of the war, and that it has now reached a point where it is ready to test the bomb.

Dr. Bradbury said that the laboratory has been working on this project since the beginning of the war, and that it has now reached a point where it is ready to test the bomb.

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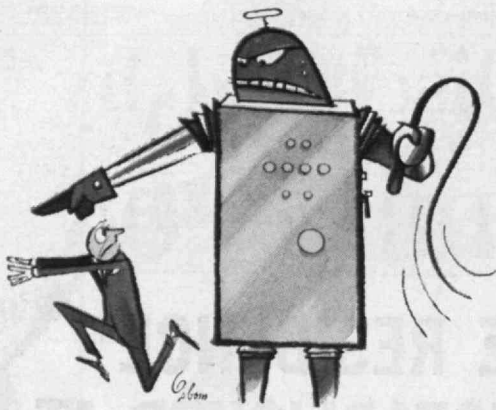
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TO BEGIN TO LIVE (Concluded from page 50)

your company will make; you will forget that others in your company, doing things you do not understand and in which you are not interested, still belong to your company; you will struggle and apparently most of the time in vain to communicate with the whole of your company, or you will relax and not try, which is worse; even more you will give up trying or be constantly frustrated in your efforts to pierce the veil of misunderstanding which separates your company from that of men in general and when you are tempted to an heroic effort in this endeavor you will be scolded even by fellows of your own company; worst of all, you will know that in your company there is a force which can separate you on the instant of a faulty decision by people who may not even be in the company at all, a force which will split the company of educated men asunder, the force of nationalism.

These are the elements of your tragedy. As I said at the beginning, tragedy does not have to have an unhappy outcome. But the working out of the outcome whether it be happy or unhappy has some hard stones along the path. Yet when you stand straight in the company of educated men and have confronted these problems bravely, even if not successfully, you will know that you have been in the right company, you will understand that "to recognize that life is tragedy is to begin to live."

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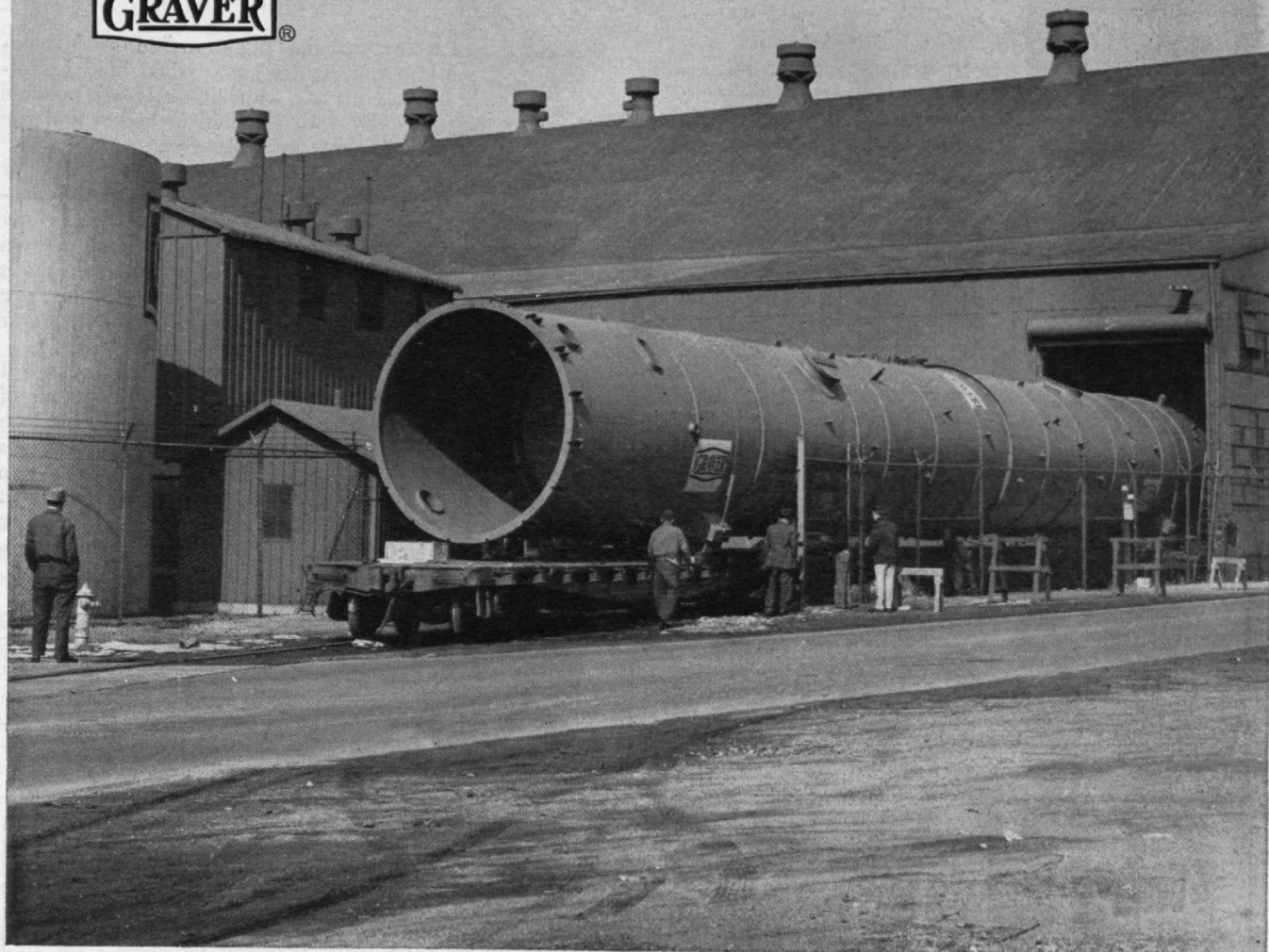


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PRESIDENT'S REPORT

(Continued from page 32)

did more than all else to delay the American university."

The record is clear that the "big jumps" in the development of American universities came when bold leadership brought increased funds, which in turn made possible a strengthened faculty with freedom of action and the realization of new concepts and objectives.

I hope that M.I.T. never becomes so complacent or self-satisfied or impoverished of new ideas that it conceives of itself as having enough. We must never set any lesser goal for ourselves than to be an institution of such adequate resources that we can really meet the demands upon us, that we can see our influence ever widening, our Faculty unexcelled, our facilities adequate to enable our staff and students to realize their fullest potential.

I am incited to make these observations because I think any attitude of complacency or any acceptance of the statement that M.I.T. is a wealthy institution in a monetary sense would tend to undercut the motivations and the ideals, the free enterprise, and the momentum which can make the difference between this being a great and vital institution and its declining into one which is pedestrian and static. Here is a clear challenge to demonstrate that a *private* institution can maintain and augment its vitality.

M.I.T. stands today at the very height of her powers and bidding fair, if she exerts herself vigorously and wisely, further to augment her excellence, her productivity, and her leadership. She could slip from this eminence, too, if she — if we — fail to understand and to meet the

(Continued on page 56)

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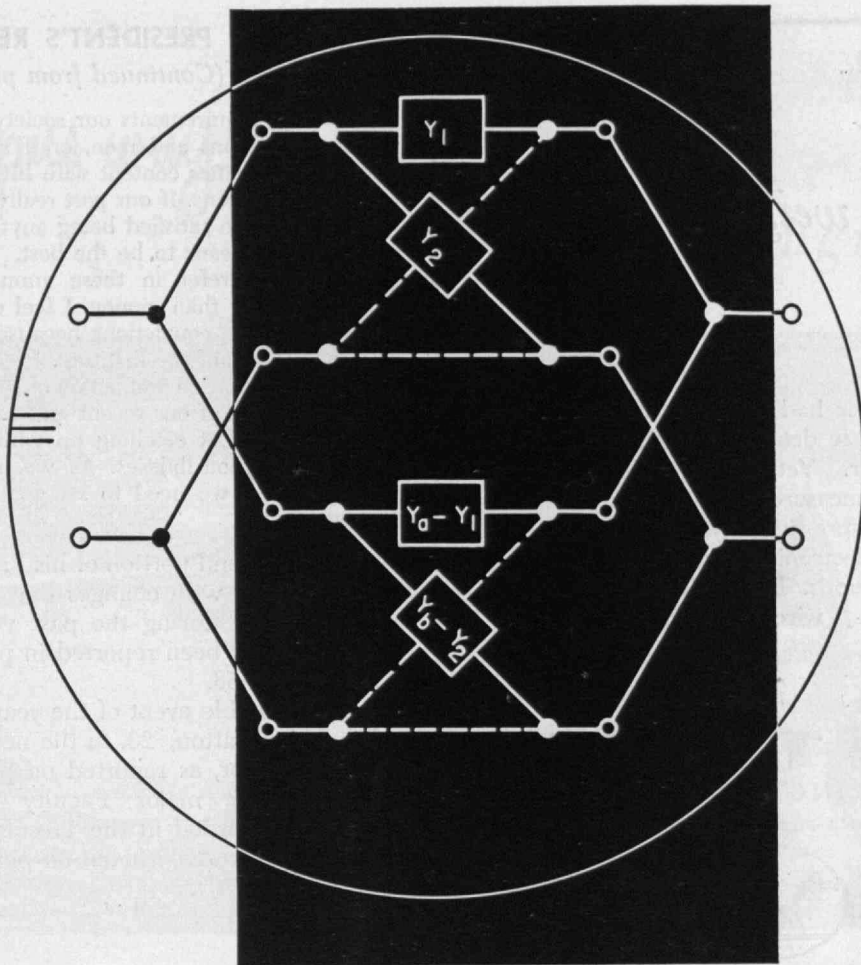
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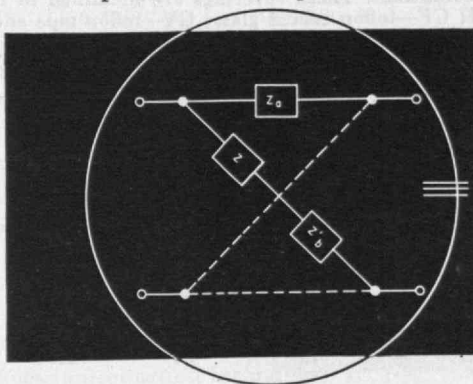
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Network Synthesis may be defined as mathematical techniques by which physical systems can be designed to give optimum characteristics.

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Those who would assist in this important project should have advanced work in complex function theory, continued fractions, matrix theory, combinatorial topology, or modern network synthesis. If this is an area in which you are qualified, please write us about your education and experience. Your inquiry will receive prompt, confidential attention.

*See, e.g., "A General RLC Synthesis Procedure" Proceedings of the IRE, February 1954, by Louis Weinberg, Sc.D., Head, Network Synthesis Group, Hughes Research Laboratory.

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PRESIDENT'S REPORT

(Continued from page 54)

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increasing requirements our society exacts of its leaders, both institutions and men, or if she sets her sights too low and becomes content with little plans, limited aims, and paltry means. If our past really proclaims our future, we will not be satisfied being anything but the best and having the means to be the best.

While I prefer in these annual reports to discuss subjects other than money, I feel compelled this year to reiterate these convictions because I feel they are vital to the welfare of the Institute. I feel that they must command the attention and action of those of us who serve as trustees. Most of our recent and current fund-raising has been directed at catching up with M.I.T.'s growth and enlarged responsibilities. As we make progress toward catching up, we need to set goals for future improvements. . . .

In the second portion of his President's Report, Dr. Killian dealt with changes that have taken place at the Institute during the past year, many of which have already been reported in pages of The Review for Volume 58.

Most notable event of the year was the election of Julius A. Stratton, '23, to the newly established post of Chancellor, as reported on page 493 of the July issue. Other major Faculty and administrative changes recorded in the President's Report include

(Continued on page 58)



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GENERALLY THESE CABLES CONFORM TO THE DIMENSIONS AND ELECTRICAL PROPERTIES OF STANDARD COAXIAL CABLES, BUT ARE DESIGNED FOR UNUSUAL SERVICE CONDITIONS IN AIRCRAFT AND ELECTRONIC APPLICATIONS. IN ADDITION, A NUMBER OF VERY SMALL CABLES HAVE BEEN DESIGNED FOR MINATURE WIRING.

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All of these cables, although having the same type of insulation, have various types of outer coverings to be suitable for the various types of service conditions. These coverings are identified in the type number as a suffix: GL—glass braid; MNL—mylar tape and nylon braid; GF—teflon coated glass; CV—teflon tape and glass braid; GGV—same with heavy duty braid; F—sealed teflon.

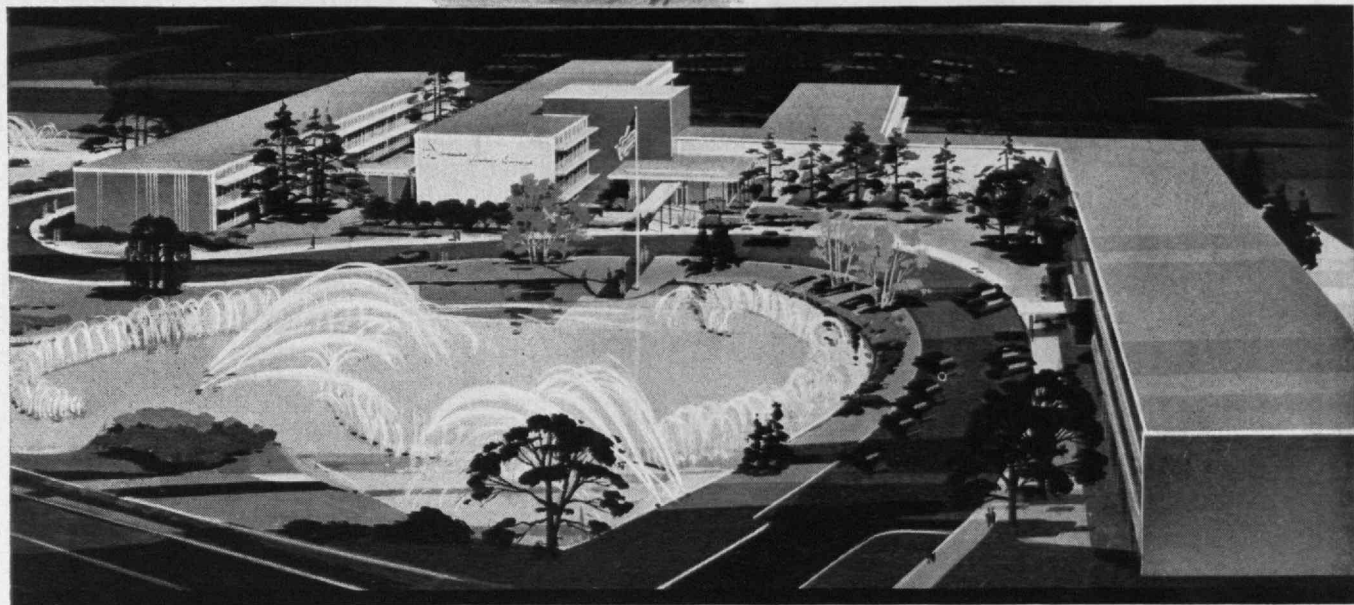
TYPE NUMBER	CONDUCTOR	O.D. NOMINAL	OHMS IMPEDANCE	CAP./FT mmf	VOLTAGE RATING	Characteristics
COX-2FS-011-GL, NL, CV, F	.011" CW	.075"	50	30	750	Low Noise-Flexible
COX-2FX-29-NL, F	7/38 CW	.075	50	30	500	RG-178/U
COX-2FS-22-GL, NL, CV, GGV	#22 str.	.125	50	30	2000	Small Flexible
COX-2FS-20-CV, NML, GGF	#20 str.	.180	50	30	2000	Flexible RG-159/U
COX-2FS-032-CV, GF	.032"	.200	50	30	2000	RG-159/U
COX-2FS-16-CV	#16 str.	.325	50	30	3000	Flexible RG-143/4
COX-2FS-13-CV, GGV	#13 str.	.375	50	30	5000	RG-115/U 115A/U
COX-2FS-10-CV	#10 str.	.490	50	30	7000	RG-94A/U
COX-2FS-5-CV	#5 str.	.710	50	30	10000	RG-93/U
COX-3FS-011-GL, NL, CV, F	.011" CW	.090	70	21	1000	Equal to RG-179/U
COX-3FX-26-NL, F	#26 str.	.120	70	21	1000	Miniature
COX-3FS-23-MNL	#23 str.	.200	75	20	2500	Smaller Flex. RG-124/U
COX-3FS-22-GL, MNL, CV, GGV	#22 str.	.170	73	20	2300	Flex. equal RG-124/U
COX-3FS-026-CV	.026 CW	.240	73	20	2300	RG-124/U
COX-4FS-011-GL, NL, CV, F	.011 CW	.125	90	16	1200	Low noise-Flexible
COX-4FX-29-GL, F	#29 str.	.140	90	16	750	Equal to RG-180/U
COX-4FS-016-GL, GF	.016 CW	.200	100	13	500	Equal to RG-62/U
COX-4FS-24-MNL	#24 str.	.240	93	14	2500	Medium voltage
COX-4FS-22-GL, CV, GF	#22 str.	.240	90	16	3000	Low capacity
COX-4FS-026-CV	.026 CW	.240	93	16	3000	Flexible Cables
COX-4FF-023-GF	.023"	.240	93	13	500	Equal to RG-71/U
COX-4FF-026-CV	.026 CW	.240	93	15	500	Equal to RG-62C/U

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Newest McDonnell planes in production for national security are the versatile F3H-2N Demon, fastest all-weather

fighter in the Navy, and three different versions of the world's most powerful fighter, the supersonic F-101 Voodoo, for the Air Force. Work is in progress on four advanced missiles, including Talos.

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PRESIDENT'S REPORT

(Continued from page 56)

appointment of E. Francis Bowditch as Special Adviser to the President (page 493, July); John T. Rule, '21, as Dean of Students (page 493, July); H. Guyford Stever as Associate Dean of the School of Engineering (page 147, January issue, and page 352, May issue); William N. Locke, as Director of Libraries (page 199, February issue); Robert E. Hewes, '43, as Registrar (page 494, July issue); Major General James McCormack, Jr., '37, as Special Adviser to the President (page 99, December, 1955, issue); Philip A. Stoddard, '40, as Assistant Treasurer (page 354, May issue); of F. Leroy Foster, '25, and James M. West as Director and Associate Director, respectively, of the newly established Division of Sponsored Research (page 27 of this issue).

In outlining the Institute's educational program, Dr. Killian spoke with justifiable pride of progress that had been made particularly in the following areas:

1. The Faculty has continued to give searching attention to the constant reformulation of curriculum which professional education requires.
2. During the summer, a Naval Reserve Officers' Training Corps unit was established at M.I.T. to join already existing Army and Air Force R.O.T.C. units.
3. The Department of Meteorology has been transferred to the School of Science; the Section of

(Continued on page 60)



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PRESIDENT'S REPORT

(Continued from page 58)

Graphics has been transferred to the Department of Mechanical Engineering where it is the responsibility of James B. Reswick, '43, Associate Professor of Mechanical Engineering; and courses in General Science, General Engineering, and Science Teaching become the responsibility of the Department of Humanities.

4. The work of the Department of Humanities in conducting seminar tutorial groups for freshmen was reported, together with the favorable reaction of students who took the seminars.

5. The enthusiastic reception of the Summer Session courses, now operated for one 10-week period in place of two six-weeks periods was recorded. The Institute's Summer Session, under the direction of Ernest H. Huntress, '20, continues to draw increasing numbers of advanced students from industry for special study at M.I.T.

6. The School for Advanced Study has been established, as reported on pages 184, 234, and 245 of the February and March issues.

7. The Committee on Student Housing, under the chairmanship of Edwin D. Ryer, '20, has issued its comprehensive report (as already noted on pages 100, 413, and 486 of Volume 58 of The Review).

Speaking of new facilities which are being established at the Institute, Dr. Killian said:

(Continued on page 62)

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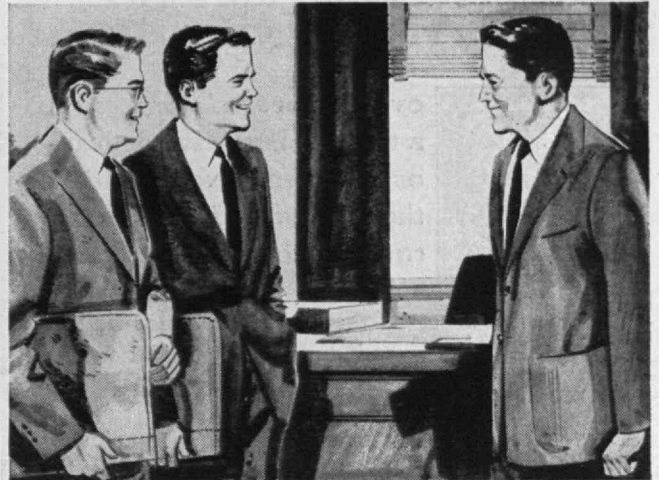
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PRESIDENT'S REPORT

(Continued from page 60)

During the year the Institute moved forward with four important new additions to its laboratory and equipment resources for education and research. The first of these, the great Karl Taylor Compton Laboratories, is well along, and we should be able to occupy the building by the beginning of the second term.

The second of these new facilities is a Computation Center, made possible by the International Business Machines Corporation. With its large, fast digital research computer (the IBM 704), the Center will meet the rapidly growing needs of the Institute for this kind of service—particularly in research—and, in addition, will serve some 24 other colleges in New England. . . .

The third major new facility planned during the year is a six-billion-volt electronic facility for basic research to be built, managed, and used jointly with Harvard University. This facility, named the Cambridge Electron Accelerator, will be built with funds from the Atomic Energy Commission and will cost about \$6.5 million. . . .

We have made important progress during the year on the building of a nuclear reactor for research and educational purposes. Construction of the reactor started last June. Costing about \$2,400,000, the reactor will be one of the most versatile ever constructed for research purposes and for teaching use, and it will give new impetus to the Institute's rapidly growing program of graduate study in the field of nuclear engineering. In this project we have had timely and generous assistance from the National Science Foundation and the Rockefeller Foundation.

Also recorded in President Killian's report is the fact that the M.I.T. community continues to be host to an ever-increasing number of scholars of international fame, that it is becoming increasingly recognized as a cultural as well as a technological center, and that its own Faculty, Staff, and Alumni continue to hold commanding positions of leadership in science, engineering, architecture, and industrial management. All of these achievements give Technology Alumni cause to be proud of the Institute's accomplishments. But there are also areas in which the Institute must plan for future service to society, and under the topic of "Unfinished Business" Dr. Killian reported:

Among numerous proposals, plans, and needs which rest on the desks of deans and other administrative officers calling for action—and usually funds—may be noted the following:

Last year a distinguished committee under the chairmanship of President Edwin S. Burell, '20, of Cooper

(Concluded on page 64)

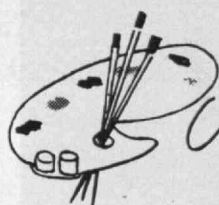


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PRESIDENT'S REPORT

(Concluded from page 62)

Union in New York, recommended establishment at the Institute of a Center of Urban Studies to supplement, extend, and strengthen our work in city planning and to provide research facilities in this area of growing importance. The principal recommendations of this committee were also endorsed by the Corporation Visiting Committee for the School of Architecture and Planning.

Similar studies on the part of committees appointed from outside the Institute remain yet to be acted upon in the School of Humanities and Social Studies. The first of these relates to the field of psychology, the second to the fine arts. We hope during the year to find the method and the means to clarify the status of these important academic fields at the Institute.

Other important recommendations of Corporation Visiting Committees include the following:

1. It is recommended that the Department of Aeronautical Engineering expand its education effort in the areas of aeronautical propulsion by increasing the amount of time allotted to this subject and by revising the course content so that the propulsion field exerts appropriate attraction for students.
2. It is recommended that a sound estimate of student population of the Department of Physics for the next several years be made and that space, facilities, and Faculty requirements for the expanding student body be planned as early as possible to insure that the high quality of the work of the Department not suffer from overcrowding, shortage of facilities, and overloading of Faculty.
3. Sympathetic consideration is recommended to the need of the Department of Geology and Geophysics for more adequate library facilities adjacent to the Department, a commons room for the use of undergraduate students particularly, and encouragement to extend its present procedures for interesting more students in the Department.
4. It is recommended that M.I.T. take the lead among scientific libraries in making available Russian technical literature.

In concluding his eighth annual message to the M.I.T. Corporation, Dr. Killian obviously took pride in pointing out as he did on Alumni Day (page 485, July issue) that: "The efficiency of all we do at the Institute is greatly enhanced by our freedom from internal stresses, cliques, and factions. We are thus unusually free to concentrate the greater portion of our energies on important constructive work. This does not mean that we do not have differing opinions, or differences of opinion vigorously held, but rather that we have an environment where such differences can occur without hardening into divisive, contentious issues."

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ENGINEERS, EXECUTIVES, EDUCATION

(Concluded from page 38)

words, the men it believes the most likely to become presidents and board chairmen. Second, the universities must realize that their task here is not to train another variety of professional specialist but to point the way to industrial statesmanship.

The in-company and university executive training programs ought to be regarded as complementary rather than mutually exclusive. Given the responsibilities of corporate management in our highly complex industrial society, the education of the men who are to assume these responsibilities has to be a continuing and varied process. For our immediate purpose, the essential feature is that the techniques which are being developed for the identification and training of executive talent are peculiarly well adapted to the needs of engineers. The young man who has a strong technological bent can afford to follow it without prejudice to his future prospects if he should turn out to have managerial potentialities. On its side, industry can recruit the specialized technical skill that it has to have with some assurance that it is also acquiring a source from which it can draw some of its requirements for high-grade leadership.

Perhaps this is all just another way of restating the familiar truth that education does not cease with the conferring of a degree. If so, it is worth restating. In the conduct of modern industry, leadership has to be capable of making intelligent judgments on a near-infinite variety of complex problems. This capacity comes to some individuals naturally, but not many. For most it has to be built up by experience and training, over a period extending well beyond the conventional limits of formal schooling.

Now it is perfectly clear that a substantial proportion of this leadership will have to be made up of engineers: we can even put it more bluntly and say that a substantial proportion is going to be made up of engineers whether we like it or not. To fill their roles properly, these engineers will have to be top-flight professionally first of all, and a great deal more after that.

Here is a challenge and an opportunity for both industry and education which they can meet only by working in close co-operation. We believe that our type of industrial society is the best that humanity has yet achieved: the most effective way to keep it so is to see to it that its leadership is of the highest attainable quality.



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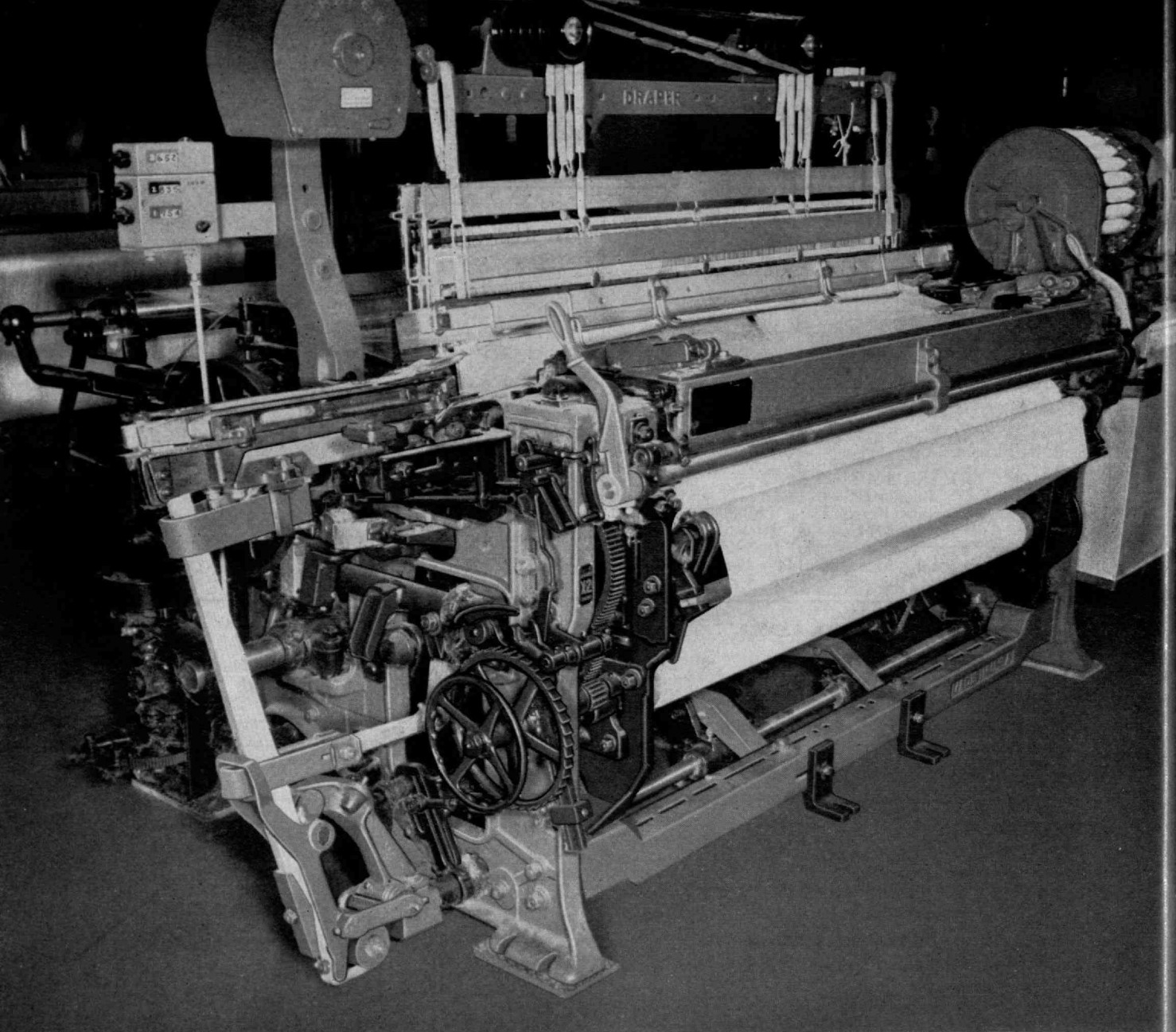
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ALUMNI AND OFFICERS IN THE NEWS

Promotions . . .

In addition to the 14 Alumni promotions recorded on page 20, additional Alumni recently advanced to new posts are enumerated below:

NORMAN A. COCKE, Jr., '36, to Manager of Rayon Filament Sales, American Viscose Corporation. . . . FREDERICK K. WATSON '36, to Assistant Manager, Export Sales Section, E. I. du Pont de Nemours and Company. . . . RAYMOND H. McFEE '37, to Director of Research, Electronics and Guidance Division, Aerojet-General Corporation. . . . PAUL N. GILLON '38, to Manager, Basic Research Branch, Carborundum Company. . . . JOHN H. HOWARD '39, to Director of Research and Engineering, Underwood Corporation;

OLIVER H. FULTON, Jr., '40, to Director of Product Planning, Underwood Corporation. . . . RUSSELL L. HADEN '40, to General Manager, Organic Chemicals Division, Dewey and Almy Chemical Company. . . . ROBERT B. JACOBS '46, and BASCOM W. BIRMINGHAM '48, to Chiefs, respectively, of the Cryogenic Equipment and Cryogenic Processes Sections, Boulder Laboratories, National Bureau of Standards. . . . STANLEY J. MARCEWICZ '51, to Manager, Industrial Engineering Department, International Business Machines Corporation.

Honors . . .

WARREN K. LEWIS '05, received an American Chemical Society award for his work in industrial and engineering chemistry, ". . . for his major part in developing fluidized bed systems for gas-solid contacting and chemical reactions."

J. N. STEPHENSON '09, was awarded an Honorary Life Membership by the Canadian Pulp and Paper Association for his fifty years in the art and science of papermaking.

DONALD W. DOUGLAS '14, President of Douglas Aircraft Company, Inc., was chosen to receive the 1956 Elmer A. Sperry Award for his contribution to transportation through the development and production of the "DC" series of airplanes. The Sperry Award is given for "a distinguished engineering contribution which, through application proved in actual service, has advanced the art of transportation . . ."

J. WARREN HORTON '14, was the recipient of an honorary membership to the Audio Engineering Society of New York for his work with the U. S. Navy at the Underwater Sound Laboratories in New London, Conn.

HENDRIK M. C. LUYKX '30, was given a citation for meritorious civilian service by General N. F. Twining, for distinguished representation of the Surgeon General at national and international conferences.

JAMES B. FISK '31, received the Honorary Doctor of Science degree at Carnegie Institute of Technology for his work with radar, electronics, and solid state science.

DONALD G. FINK '33, director of research for the Philco Corporation, is recipient of the 1956 Journal award of the Society of Motion Picture and Television Engineers.

ROBERT B. WOODWARD '36, of Harvard, was cited for his work in synthetic organic chemistry by the American Chemical Society for "brilliant achievements in the synthesis of alkaloids."

Obituary

JOHN T. CAVANAGH '88, August 5
EDMUND P. MARSH '89, May 13
EVERETT L. STEVENS '89, August 21
GORHAM DANA '91, June 22°
FREDERICK C. MOORE '91, May 9°
MORRIS A. PETERS '91, July 2°
LEWIS P. CODY '92, April 19
SAMUEL WEIS '92, April 6°
EDWARD WELLS '92, June 5°
CHARLES F. MORSE '93, August 4°
CECIL E. PAINE '93, July 1°
THOMAS G. RICHARDS '94, June 26°
PERLEY F. GILBERT '95, May 5°
AUGUSTUS J. BOWIE '96, June 22, 1955°
CLARENCE C. CULVER '96, April 24
LOUIS S. MORSE '96, July 17°
HENRY A. SHERMAN '96, July 14, 1955°
HERMAN VON HOLST '96, October 17, 1955°
HENRY A. WATERMAN '96, October 25, 1955°
RALPH A. BOWEN '97, June 25°
FRED J. HEMMINGS '97, July 22
FRANCIS V. MCCARTHY '97, August 29
ELLIOT BARKER '98, January 10°
ARTHUR BLANCHARD '98, March 25°
GEORGE H. BREED '98, June 24
ELWELL R. BUTTERWORTH '98, January 29°
ALFRED H. CASPARY '98, January 7, 1955°
ALBERT W. TUCKER '98, July 1°
WALTER R. BEAN '99, June 26°
JULES B. BENEDICT '99, about 1950
THOMAS TODD '99, July°
PHILIP B. COOPER '00, May 18°
CHARLES J. DAVIS '00, August 23
GERALD FRINK '00, July 10°
CLIFFORD M. LEONARD '00, September 9°
CLARENCE L. BROWN '01, August 24°
CHARLES M. BUTTERS '01, August
LANGDON PEARSE '01, July 20°
EDWARD H. CUTTER '02, September 5
RONALD C. KENNEDY '02, January 24, 1955
HENRY MCBURNEY '02, July 1
ERNEST L. NEWHALL '02, July 20
GEORGE H. CLARK '03, June 3°
WILLIAM H. WHITCOMB '03, August 9
RALPH H. BAKER '04, August 27°
CALVIN P. BASCOM '04, May 29°
ALDEN G. DREW '04, July 3°
RICHARD K. HALE '04, September 17
JULIUS L. HECHT '04, October 25, 1955°
JENNIE B. KENRICK '04, November 19, 1955
ROY D. MAILEY '04, June 3, 1955°
LESTER A. RUSSELL '04, September 30, 1955°

PERCY A. STAPLES '04, July 23°
EDWARD E. YEATON '04, May 28°
HOWARD H. FLAGG '05, May 3
AXEL HAMMARBERG '05, August 17, 1955°
H. HOFFMAN KENNEDY '05, May 13°
MAURICE B. LANDERS '05, June 24°
WILLIAM C. MARSH '05, May 28°
FRANCIS W. REGAN '05, January 18
CHARLES F. BREITZKE '06, June 29
KARL P. HEINZEN '06, September 25
ALLAN R. CULLIMORE '07, September 20
FLINT ELDER '07, January 15°
ROY RYDEN '07, August 18
MATTHEW C. HAYES '08, January 19°
WARREN D. SPENGLER '08, November 11, 1954
CHARLES L. CAMPBELL '09, September 12
FRED M. GREEN '09, November, 1955°
ABBOTT ALLEN '10, September 1°
W. RATCLIFFE WALDO '10, July 18, 1955
REUBEN Y. ALTHOUSE '11 May 10°
MOSS W. COLEBROOK '11, September 4
RALPH T. HANSON '11, July 1°
ALBERT N. HERMAN '11, April 21°
PAUL H. PEARSON '11, May 4°
THOMAS C. FISHER '12, January 29°
ANGUS R. HAMMOND '12, April 13°
CLARENCE McDONOUGH '12, September 19
SAMUEL W. SELFRIDGE '13, July 16
LEWIS D. BARTLETT '14, November 14, 1955°
CHESTER A. CORNEY '14, May 26°
ALEXANDER G. LONG '14, August
PALMER SABIN '15, September 20
WILLIAM FARTHING '16, March 30, 1952°
GEORGE A. ANDREWS '17, January
PHILIP O. YEATON '17, August 18
FRANCIS E. BOETTNER '20, February 28°
FREDERIC C. BOWDITCH '20 June 6°
MAXWELL K. BURCKETT '21, May 13°
THOMAS H. GRESHAM '21, November, 1955°
NELLIE JEFFERSON '21, December 11, 1955°
LUMAN T. THURBER '21, September 8
MAURICE B. BRADLEY '22, September 10
JOSEPH F. COOK '22, May 31, 1955°
PAUL J. CULHANE '23, September 8
MAURICE O. GUERIN '23, June 12°
WILLIAM E. PUGH '24, January 3
JOSEPH B. KAPLAN '25, June 19°
GERALD H. MOYE '25, July 28°
STANLEY CHENEY '26, June 7°
ERNEST A. COWAN '26, November 7, 1955
THATCHER H. MAWSON '27, June 29
IRVING M. PLANT '27, August 18°
JAMES M. SHOEMAKER '28, September 28, 1949
STAVA A. BITSOLI '32, July°
WALTER E. ALBERTSON '33, May 31°†
ROBERT H. BAKER '33, February 6†
FRANK A. CLARY, Jr., '33, August 4
JOSEPH C. CAMPBELL '34, May 9
PAUL W. LAWLER '34, July 3
JUSTIN H. BRIEFER '35, June 4°
FLOYD B. WOOD '37, April 3°
FRANK L. KING '46, July, 1955°
LUIS H. MENDOZA '46, July 10
PAUL F. GORMAN, Jr., '47, date not known°
BRUCE BAILEY '49, August 26
MITCHELL B. SMILO '49, July 20
° Further information in Class Notes
† See 1932 Notes

NEWS FROM THE CLUBS AND CLASSES

CLUB NOTES

Baltimore

One by one, they're coming back from vacations, and everyone enjoyed a good summer. Watters Pagon had a mild attack of laryngitis brought on by frolicking in the ocean off Nantucket with his grandchildren. Our President, Clint Conway, has switched from engineer to banker and we wish him much success in his new field. He advises us that he is planning, with the good help of Bill Spencer, to have a very interesting meeting in the near future. Be on the lookout for a notice of it from your Secretary. Now that you're back in harness again, how about showing up at the Engineers' Club, 6 West Fayette Street, for luncheon every Monday? You know we have a table reserved there for M.I.T. We want to beat Cornell, so how about it, men?

It is a pleasure to announce that Bill Bergen '37, has been renominated as Alumni Member on the M.I.T. Corporation Visiting Committee for the Division of Industrial Cooperation. — RANDOLPH J. PETERSEN, *Secretary-Treasurer*, 4007 Deepwood Road, Baltimore 18, Md.

Buffalo and Niagara Falls

The annual meeting and election of officers took place on May 21, 1956. The official name of the club has been adopted as the M.I.T. Club of Buffalo and Niagara Falls. The following Alumni were elected as officers and directors of the Club: Joseph A. Bergantz '41, President; Whitworth Ferguson '22, Vice-president; Edward B. Germain '13, Treasurer; Dr. Thonet C. Dauphine '35, Secretary; and the directors are Thomas H. Speller '29, Gerald E. Claussen '31, James B. Neal '15, Richard S. Paul '52, Daniel C. Mitchell '34, Richard K. Koegler '36, Warren H. Miller '45 and Robert V. Horrigan '44.

Thirty-eight members were present for dinner to hear Colonel Ralph H. Gallinger, Chief of Construction, U.S. Corps of Engineers, give an excellent illustrated talk on Waterways Development in this area. Colonel Gallinger was flooded with questions until 10:30 P.M. because the St. Lawrence seaway project is so vital to members in this area. It was decided the next meeting would be a summer outing at a member's country home, or at one of the yacht clubs. A directors' meeting was scheduled for the Buffalo Yacht Club on June 27 to discuss complete plans for this outing. — JOSEPH M. ENGEL, *Secretary*, 158 Linden Avenue, Buffalo 14, N. Y.

Charleston

The annual spring dinner meeting of the M.I.T. Club of the Kanawha Valley was held May 17 at the Kanawha Country Club, South Charleston, W. Va., with 37

Alumni and wives present. To start the party off, during the cocktail hour a guessing contest was organized by Club President, Howard P. McJunkin '43, calling for estimates of the number of nuts in a large glass jar. To the embarrassment of the engineers and to the delight of the wives, the number was most closely estimated by the non-engineer guest speaker for the evening, Charles E. Hodges, managing director of the Charleston Chamber of Commerce.

Banquet arrangements were made by Charles F. Hobson '11, and Ray M. Durrett '29. Seating assignments at the tables were made by lot to promote the mixing of guests. After the meal, the speaker sketched the geographical backgrounds of West Virginians, explaining how the rugged character of the terrain had kept the people separated through the years, causing local interest to often supersede state interest. It was a most appropriate talk for an audience composed almost exclusively of non-native West Virginians.

A slate of officers for the coming year was presented for the Nominating Committee by Joseph C. Jefferds, Jr. '40, and the following were elected: President, Daniel G. Hulett '42, Vice-president, Ray M. Durrett '29, Secretary-Treasurer, Taj F. Hanna '52, Executive Committee members-at-large, Roy M. Crawford '34 and Charles H. Gilmour '31. Among those present at the dinner were: M. M. Anderson '42, W. S. Brackett '23, G. B. Bradshaw, Jr. '40, R. M. Durrett '29, J. M. Fitzpatrick, Jr. '50, C. H. Gilmour '31, A. S. Giltinan '47, T. F. Hanna '52, C. F. Hobson '11, D. G. Hulett '42, J. C. Jefferds, Jr. '40, C. L. King '55, H. A. Kinzer '32, J. P. Leinroth, Jr. '48, R. S. Leithiser '55, A. P. Little '42, J. D. McGrew '51, H. P. McJunkin '43, M. F. Means '48, J. D. Ryan '51, Rush Taggart, Jr. '49. — DANIEL G. HULETT, *Secretary Pro-tem*, 513 Maefair Drive, Charleston 4, W. Va.

Cincinnati

The Stag Outing held at the Hamilton Boat Club on June 26 concluded a very successful year for the Club. We enjoyed an evening of speed boating on the Miami River, volleyball, shuffleboard, and cards. Before and after a delicious buffet dinner, we had adequate liquid refreshment provided by the Beckett Paper Company of which William Beckett '32 is president. The arrangements for the evening were made by James S. Stolley '52, who is also associated with the paper company. All in attendance enjoyed a very fine evening — thanks to the Beckett boys!

In addition to our outing we elected officers. Those named are: Gerald S. Burns '51, President; John P. Comer, Jr. '49, Vice-president; James S. Stolley '52, Secretary, and Samson I. Crew '34, Treasurer. Members present and therefore responsible in part for the election of these officers were: Charles D. Axelrod '48, Jack H. Barcinski '51, Marvin J. Byer '49, James

C. Emery '54, C. K. Coombs '38, John L. Eddy, Jr. '49, B. O'Daly '50, Val Friedrich '22, Thomas R. Friedrich '51, P. J. Jerardi '27, W. C. Krumrei '51, H. D. Loring '07, Bernard M. Markstein, Jr. '32, Howard A. Mills, Jr. '52, Lawrence W. Nisbet, Jr. '54, Kenneth H. Pettengill '49, George E. Power '41, Frank O. Rickers '22, Stewart Rowe '43, Robert C. St. John '47, Howard Schwartzman '51, Charles E. Seifert, Jr. '48, Walter G. Seinsheimer '36, Robert N. Summerville '52, William B. Whiston '51, John C. Todd '23, Frank J. Iskra '48, and Messrs. Beckett, Stolley, Burns, Comer, and Crew.

The success of the 1955-56 program of the Club is due to the work of retiring President Frank J. Iskra. Frank, who served as president for two years, improved both the activities of the Club and the participation of its members. Dr. William P. Cadogan '41, who served as vice-president, is leaving the Cincinnati area, and his support will be missed.

On July 10, the newly elected officers met with Frank Iskra and Walter G. Seinsheimer '36, to plan the activities for the coming year. This group will comprise the Steering Committee for the five functions tentatively planned. In addition to a Freshman Smoker in September and a stag outing in June of next year, the Committee has scheduled three dinner meetings which will include the ladies. We are looking forward to a successful year. — GERALD S. BURNS '51, *retiring Secretary*, 2529 Bell Place, Cincinnati 6, Ohio.

The M.I.T. Club of Cincinnati held its annual Freshman Smoker on August 30 at the Queen City Club to provide entering freshmen with an opportunity to meet each other and M.I.T. undergraduates from the area. The meeting was arranged by Club President, Gerald S. Burns '51, and the Treasurer, Samson I. Crew '34. After an informal refreshment period, the film *New Horizons* was shown. Allan Clark '57, and Jim Rowan '57, president of the Class of '57, then answered questions about Tech and gave the freshmen an idea of the "human" side of M.I.T. The genial, relaxed atmosphere at the Smoker made it a most enjoyable event.

The guests of the M.I.T. Club were: Dave Bentley '58, Tom Christy '60, Allan Clark '57, Tom Ludwig '58, Ken Reinschmidt '60, Jim Rowan '57, George Stivers '60, and Jim VonBenken '60. The Club members attending were: Edward Berninger '50, Gerry Burns '51, Marvin Byer '49, John Comes '49, Sam Crew '34, Edward Fox '50, Frank Iskra '48, Bill Krumrei '51, and Jim Stolley '52.

The Technology Club of Cincinnati is planning an active year of five meetings, including the Freshman Smoker. Three of the meetings will be ladies' nights, and the last program will be the stag outing. All Alumni in the Cincinnati area who do not receive Club bulletins are requested to contact the Secretary. — JAMES STOLLEY, *Secretary*, c/o Beckett Paper Company, Hamilton, Ohio.

Dayton

The M.I.T. Club of Miami Valley (Dayton, Ohio, and environs) gathered for an informal picnic supper at the home of Ed Rossman'18, on Friday evening, September 7. About 25 couples came, some from as far away as Springfield and Yellow Springs. Mrs. Rossman and Mrs. David Moyer put together the supper of baked ham, tuna fish, slaw, baked beans, and the trimmings. Beer flowed freely from the barrel, especially at the onset when Dave Moyer'46, got soaked driving in the bung. Some of the senior members present with their wives were Mr. and Mrs. Charlton Putnam'08, Mr. and Mrs. Robert E. Robillard'20, and Mr. and Mrs. Ed Rossman'18.

An election was held at which the retiring president, David F. Moyer'46, and Secretary-Treasurer, Edward E. Barney'42, were succeeded by Zachary P. Abuza'41, and Steven Heller'43, respectively. It appeared that everyone had a good time and went away happy, as all that was left was a few baked beans and several drops of beer. — DAVID F. MOYER, *Retiring President*, 94 Patterson Road, Dayton 9, Ohio, STEVEN HELLER, *Secretary*, 249 Claridge Drive, Dayton 9, Ohio.

Hawaii

The M.I.T. Club of Hawaii held a brief meeting for the election of officers during a cocktail party last Thursday, July 12, at the home of Mr. and Mrs. Walter T. Spalding'10. The ladies were included and of the 80-odd Alumni in Hawaii about 40 were present. Mr. Spalding, who has been president for the past six years, called the meeting to order, and Harry P. Field, as chairman of the nominating committee, presented the names of George W. Burgess'29 for president and Richard M. Towill'51 for re-election as Secretary-Treasurer, and these candidates met with the unanimous approval of all present.

The party was so agreeable, and the hill top views from the lanais and lawn of the city of mountains and sea were so pleasing that most of the guests stayed several hours and made it a decided success. — W. T. SPALDING, *Retiring President*, 77 Merchant Street, Honolulu 13, Hawaii.

Japan

An accumulation of work due to my illness for a while has regrettably resulted in my unintentionally delaying in reporting to you about the special meeting of the M.I.T. Association of Japan in honor of Dr. and Mrs. Wiener, which was held on April 11, 1956, at Japan Industrial Club. Thirty-five members and members' families gathered on that evening.

As president of our association, Mr. Kametani, was unable to attend that meeting owing to his unavoidable business engagement, the writer had a privilege of expressing our hearty welcome to our guests of honor on that evening, as the following dictation reads: "We have a great pleasure to have Professor and Mrs. Wiener at this meeting. Professor Wiener, authority on mathematics, the outstanding man of science, is too well known to have need of any further introduction. Most of

our members would have read of the coming visit of Professor and Mrs. Wiener in our local newspapers three, four times that it was the special. Yesterday evening at 6:30 in NHK television, we were delighted to see Professor and Mrs. Wiener of M.I.T., it announced, interviewing with Dr. Ikehara. It was excellent commenting on Cybernetics that owes its existence to Professor Wiener, and is a marvelous and multiple science which, I understand, deals with communications in both man and machine. I am sure that Professor's lectures around Japan in these new fields are at the peak of excellence, and by giving visual acquaintances, will be very impressive to our scientists and engineers as at present when automation is taking root in our industrial enterprises. As to Mrs. Wiener, I asked Dr. Ikehara, who answered me in a single Japanese word, 'Ken-Pujin,' which means the highly intellectually accomplished and the very best better-half. It is no wonder that the Professor has dedicated in the front page of his book, *Ex-prodigy*, that under her gentle tutelage he first knew freedom. We all hope that the Professor's lecture trips around Japan will be a pleasant experience and enjoyable one."

After Professor and Mrs. Wiener made a nice speech, every member introduced himself in turn. It was a very pleasant meeting. Professor Wiener gave several lectures in Tokyo, and made a lecture trip to Nagoya, Osaka, Fukuoka, Hiroshima, Sapporo, and Sendai, and enjoyed immense popularity with audiences overcrowded. His lectures were translated and aired through Japan Broadcast Network, and M.I.T. became more famous in Japan. Professor and Mrs. Wiener have sailed from here for San Francisco on the *Cleveland* on May 30. — Y. CHATANI, *Vice-president*, 2862 Setagaya, Setagayaku, Tokyo, Japan.

Kansas City

Plans for the reactivation of the M.I.T. Club of Kansas City were completed during the summer months. Surprisingly, our mailing list shows 125 Alumni in the Greater Kansas City area. There are an additional 140 in the surrounding area on our mailing list. This issue of the Review should reach the readers just about the time of our first meeting. A dinner meeting is planned for Friday evening, November 9, at the University Club. Mr. Louis H. G. Bouscaren, an M.I.T. Alumnus from Chicago, will be our guest speaker. For December we plan to have as our guests at a luncheon meeting, the students and their fathers from the Greater Kansas City area. The date has been set for Saturday, December 29. — B. J. DUFFY, *Secretary*, 10-44, 5621 Tahoe Lane, Kansas City 3, Mo.

New Hampshire

On May 14, 1956, the M.I.T. Club of New Hampshire held its annual meeting at the Manchester Country Club. Our President, Roger LeBlanc, presided. Charles R. Pritchard'30, was elected president; Norman P. Randlett'22, was elected vice-president; Blaylock Atherton'24, was re-elected secretary-treasurer.

Lawrence Hall'35, was named representative to the Alumni Council.

After a social hour of good fellowship, those present partook of a delicious chicken dinner. Lobby Lobdell gave a most interesting talk and commented on the shifting of the center of M.I.T. Alumni population in the United States. Don Severance showed the movie *SAGE*, which was viewed with interest by all present.

In recent years many of the Alumni have brought their wives to these meetings and the idea has proved very popular with the ladies. A list of Alumni and guests attending follows: Mr. and Mrs. Harold Lobdell and Mr. Donald Severance from Cambridge. W. G. Abbott, Jr., '06, Blaylock Atherton'24, Louis A. Arnold'42, Norwin S. Bean'94, Edward A. Beaupre'41, Reginald A. Bisson'30, Edward S. Campbell'42, Ormonde C. Clissham'14, Jere R. Daniell'97, Walter D. Davol'06, Charles M. Dierksmier'37, James W. Doon'17, Robert G. Emerson'49, Carl A. Hall'08, Lawrence C. Hall'35, Leigh S. Hall'14, Sidney L. Hall'43, Hugh G. Hamilton, Jr., '29, Russell B. Hawes'49, Louis B. Heaton, Jr., '38, Clarence G. Holt'17, Glenn D. Jackson, Jr., '27, Leon W. LaBombard'41, Roger E. LeBlanc'39, Sing Leong'45, Julian Lovejoy'22, Roger G. Moss crop'20, Charles R. Pritchard, Jr., '30, Saul Sigel'30, Herbert D. Swift'15, William C. Tallman'42, Davis P. Thurber'48, A. Edward Tuttle'17, Halsey A. Weaver'36. — BLAYLOCK ATHERTON, *Secretary-Treasurer*, 142 Main Street, Nashua, N.H.

New London

The M.I.T. Club of the Thames wound up its first season as an M.I.T. Club with a dinner meeting at the Wagon Wheel Restaurant in Poquonnock Bridge, Conn., on May 24, 1956. Twenty Alumni and their wives (and/or dates), heard Professor Samuel C. Prescott'94, noted industrial biologist, M.I.T. professor, and author, speak on his recent book, *When M.I.T. Was Boston Tech*.

Mr. Donald P. Severance, Secretary-Treasurer of the M.I.T. Alumni Association, introduced Dr. Prescott. George Siefert'51, presided over the meeting and was assisted by Howard Livingston'51. John D. Lewis was appointed chairman of the nomination committee to present a slate of officers for fall election. A question and answer period followed the meeting, and was stimulated by Dr. Prescott's comprehensive knowledge of M.I.T. history. It was established, however, that in spite of a close working relationship, and the fact that at one time an M.I.T. degree also entitled the recipient to a degree from Harvard, M.I.T. and Harvard are separate entities. — GEORGE J. SIEFERT, *Secretary Pro-tem*, 9 Laurel Drive, Groton, Conn.

New Mexico

A formal meeting of the Club was held at the Franciscan Hotel in downtown Albuquerque on June 8. A dinner and social hour preceded an evening of dancing which was much enjoyed by the following: Lt. and Mrs. Dan Babcock'53, Dr. and Mrs. B. L. Basore'52, Mrs. T. K.

Emree, guest, Mr. George L. Erickson'22, guest, Mr. and Mrs. Fred Given'19, Mr. and Mrs. J. E. Gross'50, Miss Peggy Hinkle, guest, Mr. and Mrs. Fred Mulberry'39, Lt. Col. and Mrs. Leon Punsalan'41, Mr. Robert Quinlan'30, Mr. George Reis'50, Dr. and Mrs. Bill Rollososon'47, and Dr. and Mrs. William Wells'48. — FREDERICK C. ALEXANDER, JR., *Secretary-Treasurer*, 399 Washington Street, N.E., Albuquerque, N.M.

New York

The M.I.T. Club of New York celebrates one year of progress in its new and comfortably situated quarters in the Chatham Hotel. A liquor license, and the capable services of a club steward, Richard, provide opportunities for informal get-togethers during the cocktail hour as well as at other times. As a result of Joe Conrad's becoming part of the Institute's Staff, the Club has a new executive club manager, Fred Parsons. Mr. Parsons is at the club every day and can be contacted at Plaza 5-3094 for hotel reservations and other special assistance. He enjoys helping both visiting and local Alumni.

Daily attendance during the lunch hour has been steadily increasing, and because of this fact, the Board of Directors, at its recent meeting, voted to enlarge the club quarters. The Club now provides a credit charge convenience for all members in good standing. M.I.T. Alumni from other parts of the country are extended an invitation to join the Club by sending a letter of application to the M.I.T. Club of New York, Chatham Hotel, Vanderbilt Avenue and 48th Street, New York City.

The Westchester section planned the following program: November 8, Stag Dinner; January 15, Dinner Party; June 4, Golf Party. The Long Island section planned the following activities: September 28, Dance at Roslyn Country Club; November 8, Plant tour of the United Airlines Maintenance Building at Idlewild; January 17, Special Event.

In addition to the above activities, a beer party was held at Ruppert's Brewery on Thursday, October 4. November 14 is the date on which the Club will hold its dinner at the Hotel Biltmore. This dinner (to which wives, etc., are invited) will serve as the big social event of the year. At this affair, a silver stein will be presented to a man, well known in Technology circles, as well as to the entire world.

The following Alumni have been nominated to M.I.T. Corporation Visiting Committees: Joseph W. Barker'16, Department of Modern Languages; Herbert G. Fales'20, Department of Regional and City Planning; James A. Lyles'27, Department of Economics and Social Science; Paul S. Baker'29, Department of Aeronautical Engineering; Paul V. Keyser, Jr., '29, Department of Humanities; Philip C. Rutledge'33, Department of Civil and Sanitary Engineering; Daniel D. Strohmeier'34, Department of Naval Architecture and Marine Engineering; Franklin S. Cooper'36, Department of Architecture; Ward J. Haas'43, Department of Biology. — HARVEY KRAM'42, *Secretary*, 101 Barnyard Lane, Roslyn Heights, Long Island, N.Y.

Northern New Jersey

The M.I.T. Club of Northern New Jersey looks forward to a very active and successful year. The first meeting of the Board of Governors took place on September 18, 1956 at the Hotel Suburban, East Orange, to discuss plans for the year.

The first full meeting of the membership was scheduled for Wednesday, October 17, 1956, also at Hotel Suburban, East Orange. The officers and committee men for the year are as follows: President, Donald H. Spitzli'27; Vice-president, Stuart G. Stearns'39; Secretary, John T. Reid'48; Assistant Secretary, Robert M. Gould'45; Treasurer, Joseph Wenick'21; Assistant Treasurer, James J. Shyne'43. New Members to Board of Governors: Jack F. Andrews'33, whose term expired in 1956, was re-elected to the Board of Governors for another term of three years. In addition, Clayton D. Grover'22, and A. Donald Green'26, were also elected to the Board, each for a three-year term, succeeding Russell P. Westerhoff'27, and Stuart G. Stearns'39, whose terms expired this year. Committee Chairmen: Program, Kenneth J. Radimer'42; Placement, H. K. MacDonald'22; Scholarship, George F. Des Marais'20; Educational Council, Chester A. Williams, Jr.'39; House, Jerome E. Salny'37; Reception, Stuart G. Stearns'39; Publicity, Albert R. Shelby'45; Attendance, R. Brooke Pietsch'47; Finance, Joseph Wenick'21. — JOHN T. REID, *Secretary*, 80 Renshaw Avenue, East Orange, N.J. ROBERT M. GOULD, *Assistant Secretary*, 15 Wellington Road, Livingston, N.J. JEROME E. SALNY, *Acting Secretary*, Egbert Hill, Morristown, N.J.

Oklahoma

A lawn party was held at the home of Mr. and Mrs. William J. Sherry'21, on July 23, 1956, for members of the M.I.T. Club and their wives who live in the vicinity of Tulsa. The guests of honor were Mr. and Mrs. Harold E. Lobdell'17 of Cambridge, Mass., and Mr. and Mrs. Antonio Rodriguez'21 of Havana, Cuba.

The following members of the M.I.T. Club of Oklahoma attended the lawn party: Dr. and Mrs. S. Y. Andelman'37, David A. Bartlett'39, Mr. and Mrs. John G. Burke'38, Mr. and Mrs. Alanson W. Chandler'37, Mr. and Mrs. Dewey E. Chapman, Jr., '47, Mr. and Mrs. Joseph D. Eisler'32, Mr. and Mrs. Willard A. Emery'21, Mr. and Mrs. Willard S. Emery'50, Dr. and Mrs. A. F. Frederickson, Mr. and Mrs. Wilson N. Gilliat'42, Mr. and Mrs. Curtis S. Green'48, Mr. Lon S. Gregory, Mr. and Mrs. B. E. Groenewold'25, Mr. and Mrs. Stanley J. Harshman'49, Mr. and Mrs. John W. Hawkins'48, Mr. and Mrs. Erling O. J. Helland'40, Mr. and Mrs. Donal K. Holway'47, Mr. and Mrs. William N. Holway'43, Mr. and Mrs. William R. Holway'15, Mr. and Mrs. Karol L. Hujsak'47, Dean Jacoby'54, Mr. and Mrs. Richard Mungen'47, T. W. Gilmer Richardson'42, Mrs. Barrett B. Russell'43, Ernest T. Schoenwald'42, Mr. and Mrs. William J. Sherry'21, Dr. and Mrs. Daniel Silverman'29, Mr. and Mrs. Robert D. Snow'42, Dr. and Mrs. Samuel C. Stephan, Jr., '50, Dr. and Mrs. Scott W. Walker'40.

Dr. Daniel Silverman'29 has been nominated to the M.I.T. Corporation Visiting Committee for the Department of Geology; Mr. Erling O. J. Helland'40 has been nominated to the Visiting Committee for the Department of Regional and City Planning. — BARRETT B. RUSSELL, *Secretary-Treasurer*, 4562 East 38th Place, Tulsa 5, Okla.

Puerto Rico

The M.I.T. Club of Puerto Rico held a meeting at the Reserve Officer Beach Club on September 22, 1956, from 11:30 A.M. to 7:00 P.M. Many members, wives, and children were present and after discussing general matters and lunching, we stayed at the beach, enjoying swimming. It was a great pleasure to learn of the assignment of Mr. José A. Domínguez as President of the Puerto Rico Telephone Company, and the appointment of Mr. Luis A. Ferré as an Alumni Member for the M.I.T. Corporation Visiting Committee for the M.I.T. Libraries. The Corporations Visiting Committees are composed of nine members: three members of the M.I.T. Corporation, three non-M.I.T. members chosen by the President, and three M.I.T. Alumni members chosen by the Alumni Association with the endorsement of the head of the Department. The purpose of the Committee is to give the Department the benefit of advice and opinions of an interested group other than those actually connected with the M.I.T. Faculty or Administration. — ULISES B. LOUBRIEL, *Secretary*, P. O. Box 9447, Santurce, Puerto Rico.

Toledo

The M.I.T. Club of Toledo held its regular luncheon meeting at the Toledo Club at 12:00 noon, July 2, 1956. The meeting was attended by 15 of approximately 45 Alumni in our area. After lunch the new General Electric Company color movie *Automation* was viewed and enjoyed by the group. Our new President, Al Picardi'44, and new Secretary, Bill Mitchell'49, who were elected at our June meeting, assumed their duties for the first time.

Under the able leadership of past-president John Northup'39, and Gid Spieker'50, our monthly luncheon meetings have maintained a steady popularity. We plan to continue these luncheon meetings on the first Monday of each month at 12:00 noon at the Toledo Club. Our primary objectives will continue to be the fostering of fellowship among M.I.T. Alumni in our area, and the encouragement of Alumni interest in Institute affairs. Alumni and Institute Staff who travel in our area are welcome to join us at our luncheons. — E. ALFRED PICARDI, *President*, 3143 Goddard Road, Toledo 6, Ohio.

Washington

Activities were resumed with the ever-popular stag smoker at the Potomac Boat Club on October 11, amid shells, oars, beer, food, and good fellowship. Regular meetings, with the usual outstanding guest speakers, are scheduled for November 29, January 24, March 28 (Ladies

Night), and May 23. We plan to match last year's outstanding programs, including such speakers as Detlev Bronk and Judge Edith Cockrill (Juvenile Court). — D. C. COOK, *Assistant Secretary*, Solar Aircraft Company, 1625 Eye Street, N.W., Washington, D. C.

CLASS NOTES

1890

Only two of the '90 Alumni attended our June, 1956, Alumni Day exercises. However, the Class got into the newspapers since the *Boston Globe* had ordered its photographers to get a picture of the typical "oldsters." The Class of '90 had started the scholastic year of 1957 with 15 living graduates.

From the Belmont (Mass.) *Citizen* we learn that Charles Sherman has been living the past winter and spring with a large swarm of bees, possibly as many as 50,000 within a few feet of his quarters that he is occupying in his own house. "Getting the squatters to leave involved considerable carpentry work on the part of an apiarist and his assistant. After removing shingles and boards from a section of the house, they used an amnesia on the bees, located the queen, and placed her in a box on the lawn, to which the rest of the swarm followed." The Secretary has felt that Sherman is one of the most fortunate of our Alumni because he has a steady job, requiring a short visit to the bank each morning, after which he goes home and occupies himself with whatever he desires. It seems to be a just reward for a long period of dependable service. — GEORGE A. PACKARD, *Secretary*, 25 Avon Street, Wakefield, Mass. CHARLES W. SHERMAN, *Assistant Secretary*, 16 Myrtle Street, Belmont, Mass.

1891

The Class had its annual dinner at the Brookline Country Club on Saturday, June 9, 1956. Eleven who sat down at the round table were Harry Young, President; Channing Brown, Temporary Secretary; Lynfield Damon, Ernest Tappan, Edward Earl, Carl Bunker, E. A. Reed, Walter Douglass and his son Donald, Joseph Warren, and Arthur Pierce.

Robert S. Ball of 60 Storey's Way, Cambridge, Eng., sent regrets at his inability to be present and added: "I will raise a glass to you on the day with something better than tea." Those who came from the greatest distances were Arthur Pierce of Pittsfield, and Joe Warren of Cumberland Mills, Maine.

Four of our class were present at the Alumni Day banquet: Daymon, Earl, Pierce, and Young. President Young opened the meeting and Channing Brown read from messages and letters of the class not present. Clouston Moore had written that he would come as usual, but word came that he died at his home in Grosse Pointe Farms, Michigan, on May 9, 1956.

Five of our fellows have dropped out; Clyde Holliday died on May 30, 1955, but we were unaware of this on June 11

at our annual meeting. Notice of this death was published in the July 1956 Review. Since that date four have died. First, Leonard Abel Wheeler, whose ancestors settled in Lincoln and Concord, Massachusetts Bay, in early colonial times, entered Tech with us in the fall of 1887. A newspaper clipping states "Mr. Wheeler was a great-great grandson of Samuel Hastings who was a currier in the Continental army under General George Washington. He was one of the few men eligible to be buried in Boston Commons cemetery in Boston as descendant of Mr. Hastings."

His wife wrote me on April 28: "Your letter came to Leonard on a beautiful spring morning and brought much happiness with it — many memories and recollections. Leonard is sorry he can't be with you at the dinner on the ninth of June, but for many years he has had a heart condition which has kept him close to home in the winter time (Troy, Ohio) and in the Michigan woods in the summer time. Just now, for the past several weeks, he has had to be in bed, but he is cheerful and much interested in the M.I.T. Class of 1891 and wishes you, one and all, the best of luck."

Mrs. Wheeler's second letter reads in part as follows: "Your very nice letter came to me the day Leonard died — May 5, 1956. He would have been so interested in your relation to the Wheeler family. Leonard's grandfather and his father were born in Lincoln, Mass. The old home still is in the name of Wheeler, and his ancestors came from Concord."

"My family and the Wheelers have been neighbors in Concord for generations back. Some four generations back, a Brown youth, of my line, married a Wheeler maid of his."

Leonard Wheeler died in Troy, Ohio, May 5, 1956. He was married to the former Charlotte Thompson, November 1, 1898, in Saginaw, Mich. Surviving are his widow; three daughters, Mrs. Hal Smith, Mrs. Hugh Chalmers, and Mrs. Nelson Holland, all of Grosse Pointe, Mich.; a son, Thomas Wheeler of Troy; one sister, Josephine Hall of Cincinnati, and 11 grandchildren.

Frederick Clouston Moore was born in Brookline, Mass., February 6, 1870. He was graduated from Brookline High School in 1886, then spent a year on a farm near Wetmore, Kansas. Entering M.I.T. he elected Course II and was graduated with the Class of 1891. After three months in the employ of the Johnson Company at Johnstown, Pa., he joined the D. M. Osbourne Company at Auburn, N. Y. He remained with this company, and its successor, The International Harvester Company, until 1909, being concerned with the operation of the various manufacturing departments and ultimately being the supervisor of the Eastern plants of the Harvester Company.

In 1911, he took part in organization of the General Motors Company under Tracy Lyon '85, overseeing the operations of the several plants. The proposed organization did not work out and he joined Ferro Foundry and Machine Company in Cleveland.

About 1912, he opened a consulting office in Cleveland and carried that on

until the beginning of World War I. He then joined the Pittsburgh Office of the Aircraft Procurement organization, and was with them until the end of hostilities. With the close of the war he was called upon to operate Vermilion Malleable Iron Company at Hoopston, Ill., where he lived until his retirement in 1939. He was officer and director of the Malleable Iron Company and other concerns affiliated with it. In 1921, he was instrumental in organizing Canton (Ohio) Forge and Axle Works which operated under his direction for the next eighteen years. In 1928, the several properties with which he was connected were acquired by Poor and Company, of which he became a vice president and director.

After retirement, he continued to live at Hoopston for several years before moving to Detroit to be with his eldest son. That city remained his residence until his death on May 9, 1956.

In early 1903, Fred married Miss Ellen Palmer of Auburn, N. Y. She died in 1919. He is survived by his two sons, David Moore of Detroit, and Philip Moore of Seattle, and five grandchildren.

Gorham Dana died on June 22, and notice in the *Boston Herald* reads, in part, as follows: "Gorham Dana, 87, of 44 Edgehill Road, Brookline, long a civic leader in Brookline, died yesterday. He had served for 20 years as chairman of the Brookline Planning Board, and was an organizer and the first secretary of the Brookline Taxpayers Association. He had been a member of the Brookline Republican Town Committee for more than 20 years, serving until recently as treasurer."

"He was born in Charlestown, October 9, 1868, son of James Dana, then mayor of Charlestown, and the former Julia Hurd. Mr. Dana worked with the U.S. Geological Survey in California and later joined the faculty of M.I.T. Still later, he became a fire protection engineer for the Fire Underwriters Bureau of Boston, and served as manager of the bureau from 1903 until his retirement in 1929. He was a lecturer and the author of two volumes on fire protection."

Long active in Brookline affairs, he served as a town meeting member from the start of the representative form of government until 1952. He also had served as chairman of the town improvement committee of the Brookline Civic League, as chairman of the Long Range Planning Committee, and as a member of the Post War Planning Committee.

From the many testimonials I have received from the members of the class, I quote but two. Ambrose Walker writes: "Gorham Dana was a delightful man and near neighbor, and always working for the good of the Class of '91." And Walter Douglass sends me this: "Gorham was one of my closest friends in the class, and he was one who through the years kept a continued interest in M.I.T. affairs. He was a prominent man in the town of Brookline."

The Town Clerk of Brookline, Arthur Shinner, also sent me a copy of the resolution adopted by the Brookline Planning Board on the termination of Dana's service in March 1955. — CHANNING BROWN, *Secretary*, 15 Forest Avenue, Hastings-on-Hudson, N. Y.

The secretary represented the Class at the Alumni Luncheon last June. One other member, Harry Burnham, sent in a letter at that time, regretting that he would be unable to attend.

The secretary regrets to have to report the passing on of three of our classmates — Gorham Dana, Edward Wells, and Samuel Weis.

The secretary is indebted to the Boston *Herald* for the following account of the career of Gorham Dana, who was graduated with us in Course I. "Gorham Dana, 87, of 44 Edgehill Road, Brookline, long a civic leader in Brookline, died June 25, 1956. He had served for 20 years as chairman of the Brookline Planning Board, and was an organizer and the first secretary of the Brookline Taxpayers Association. He had been a member of the Brookline Republican Town Committee for more than 20 years, serving until recently as treasurer. He was born in Charlestown, October 9, 1868, son of James Dana, then mayor of Charlestown, and the former Julia Hurd. The family subsequently moved to Dorchester, then to Brookline. Graduated from M.I.T. in 1892, Mr. Dana worked with the U. S. Geological Survey in California and later joined the faculty of M.I.T. Still later, he became a fire protection engineer for the Fire Underwriters Bureau of Boston, and served as manager of the bureau from 1903 until his retirement in 1929."

Edward Wells, who was graduated with us in Course II, died on June 5, 1956. The secretary is indebted to the *Dayton Journal Herald* for the following account of his career. "Private services for Edward Castle Wells, 85, head of the Platt Iron Works, Inc., until 1955, were conducted at the Doom Memorial funeral home, New Carlisle. Mr. Wells, who headed the pioneer Dayton firm at 435 Keowee street from 1920 until last November, died at 11:43 P.M., Tuesday, in Miami Valley hospital, where he had been admitted several hours earlier. A resident of 7643 Shull Road, near New Carlisle, Mr. Wells had been in failing health for several months. He joined the Platt firm in 1913 as works manager when he first came to Dayton. In 1918, Mr. Wells left the company, returning in 1920 when he bought the firm and took over as president. Mr. Wells sold his interest in the firm last November to a corporation headed by Ben Dlott. Taking an interest in civic affairs in Dayton, Mr. Wells served as president of the Dayton Research association; a director of the Dayton Community Chest, a member of its budget committee, and a director of the Ohio Chamber of Commerce. He was a member of the American Society of Mechanical Engineers, Delta Upsilon fraternity, the Engineers Club of Dayton, the American Sealyham Terrier Club and the Newcomen Society of America. Born in Quincy, Ill., Mr. Wells attended Mitchell Boy's school at Billerica, Mass., and M.I.T. where he graduated with a bachelor of science degree in mechanical engineering in 1892. Mr. Wells was married in 1936 to Frances Foster Wells, Wyoming, Ohio, after the death of his first wife, Mary C. Brookings, Boston, Mass.

Besides his wife, survivors include two daughters, Mrs. Charles Smythe, Brookfield, Conn., and Mrs. Philo B. Lang, Dubuque, Iowa; two sons, Edward of Lancaster, Ohio, and George Wells II, Lincoln, Mass.; a brother Lawrence, Ocala, Fla.; 13 grandchildren and 18 great-grandchildren."

The secretary would like to add the following extract from the *Dayton Daily News*. "It has been a good many years since Edward Castle Wells, whose death came Tuesday in his 86th year, was active in civic life. But in his prime he made contributions to the betterment of Dayton that were at least as significant in his activities in the manufacturing world. A man of conservative political philosophy, Mr. Wells also was a man of progressive community outlook. Untrammelled individualism was his creed and unashamed humanity was his stock-in-performance. The Community Chest is one among many organizations which has cause to remember his works with gratitude. A person of strong convictions, Mr. Wells had an innate respect for the convictions of others. His friends sensed and appreciated these qualities, and responded to them with deeply imbedded loyalties. Edward C. Wells was a man who earned both the affection of those who knew him best and the respect of the community as a whole."

The secretary recently received notice of the death of Samuel W. Weis on April 6, 1956. He has no account of his career other than the following from the Alumni Register. He was with us in Course I and had worked up to be chairman of the board of the Illinois Electric Ventilating Company, with offices at 2850 North Pulaski Avenue, Chicago, Ill. — CHARLES E. FULLER, *Secretary*, Box 144, Wellesley 81, Mass.

1893

Notes on the June 11, 1956, class luncheon have been sent to all members of the Class, together with a picture which was taken at that time. We all wished for a larger attendance at this reunion.

We regret to record the passing of two classmates. Cecil E. Paine of Bath, Maine, died on July 1, 1956. Mrs. Paine wrote us in May of this year that her husband had been in the hospital since August, 1955.

We are in receipt of a letter from Gregory S. Morse of Deal, N. J., advising us of the death of his father, Charles F. Morse of Patchogue, N. Y., on August 4. He writes of his father: "My Dad had been in fairly good health and the end was rather sudden but peaceful. He was 85 years old. Most of my Dad's career was concerned with highway construction for both the Massachusetts and New York highway departments. I remember his talking of work on the Lynn sea wall and the Fellsway. He went to New York State about 1908, where he was engineer in charge of road construction. I believe it was pioneer work as far as concrete was concerned. At the time of his retirement in 1940 he was Suffolk County Assistant Engineer for the New York State Highway Department. He was a member of the American Society of Civil Engineers

and the Boston Society of Civil Engineers." — GEORGE B. GLIDDEN, *Secretary*. GERTRUDE B. CURRIE, *Assistant Secretary*, c/o Fay, Spofford and Thorndike, Inc., 11 Beacon Street, Boston 8, Mass.

1894

Again the editor has issued his call for class news and once more the secretary responds. All members of the Class and many others will be interested in the item which must be given first place in these notes, a tribute to a man of extraordinary character and friendliness. The annual report of the Manchester, N. H., Savings Bank, issued in August, contains a glowing "Tribute" to Norwin S. Bean, who after many years has retired as treasurer and chief executive officer. It is a pleasure to quote.

"Having for many years served the community that he loves, and which loves him, Mr. Bean has decided to forgo his usual active participation in our day-to-day operational problems. He retired as Treasurer of this Bank after 29 years of faithful service, in which he saw continued growth and prosperity under his guidance.

"We at the Bank will miss his active participation in our operational problems, but are happy that he will remain in an advisory capacity."

Norwin has made a splendid record for over 60 years, but we of the Class think of him as a wonderful companion, one of our star golfers, and an ever loyal friend, for whom we wish happy years to come.

From the other side of the continent Jack Nowell now writes that his street address is unchanged, but he lives in Hillsborough, not San Mateo. How those California towns do grow! We hope Jack's beautiful home place will not suffer from the encroachment of increasing population.

Again it is a sorrowful duty to report the passing of another of our classmates. Thomas Gleason Richards died on June 26, 1956, after a short illness, the immediate cause of death having been of cancerous character. Up to a short time before his death he had been in good health and very active in gardening and other pleasant avocations.

Tom was one of the captains in the freshman battalion, enrolled in the course in Mechanical Engineering, and following graduation in 1894 was appointed assistant in the Department of Mechanical Engineering. Then he entered the employ of the Boston Woven Hose and Rubber Company, where he remained for several years. He married Miss Fannie Lawrence of Cambridge, and three daughters were born of this union. From 1906 to 1921 Richards was an officer of the Quaboag Rubber Company of North Brookfield. His next position was as a partner in the Jack Tire and Rubber Company in Spokane, Washington, but after four years he returned to New England, first in the Latex Division of the U.S. Rubber Company at Naugatuck, Conn., and later in the New York offices of the main company. He retired on reaching the age of 75, and thereafter lived at Duxbury, at the home of one of his daughters — Mrs. Richards having died in 1943. For the past five

years he had made his home with his daughter, Mrs. (Dr.) J. M. Baty, in Belmont and Duxbury. Tom will be mourned by his classmates, although he had not been an attendant at the usual five year reunions for many years.

In June, your secretary had the interesting assignment to introduce B. E. Proctor '23, who became the recipient of the Appert Medal, the highest award in the Institute of Food Technologists. This event took place at the annual national meeting of the I.F.T. held this year in St. Louis. It was distinctly an honor to thus present a former student, now the very successful head of the Department of Food Technology at M.I.T. This Department now has an outstanding place in the training of food technologists and engineers.

A few weeks after this happy event, your secretary developed a painful attack of shingles, which had not completely disappeared as these notes are written, but as the late Dr. Munyon is reported to have said, "There is hope." — SAMUEL C. PRESCOTT, *Secretary*, Room 16-317, M.I.T., Cambridge, Mass.

1895

In the May, 1949, issue of this Review we noted the receipt of a card-photograph of Mount Francois Matthes, sent to us by Edith Lovel Matthes in loving memory of her husband, Mount Francois Matthes in the St. Elias Range, Yukon Territory, Canada, was named in the summer of 1948 by the members of the Arctic Institute of North America's Project Snow Cornice.

We now learn from a recent letter from Gerard Matthes — the twin brother — that Francois will become immortalized by having a mountain peak and also a glacier in Nevada named after him. We quote the *Desert Magazine*, issue of August, 1956, published in Palm Desert, Calif., to the effect: "A movement has been launched for the creation of a new 28-square mile national park in the Snake Range of Nevada with Lehman Caves, Wheeler Peak and Matthes Glacier as the central attractions. Weldon Heald of Tucson, Arizona, proposed to the National Board of Geographic Names, that the ice flow in the heart of the desert mountains be named Matthes Glacier, honoring the memory of Francois Emile Matthes (1874-1948) who was one of America's distinguished geologists and a world authority on glaciers."

A map section of Nevada Natural Forest, printed on page 5 of the *Desert Magazine*, shows Matthes Glacier descending from Wheeler Peak (13,061 feet) and facing Matthes Peak (12,800 feet). These are on the headwaters of the Snake River, important tributary of the Columbia River. Gerard Matthes is still living in New York City, at the Broadway Central Hotel, occasionally doing consulting work, but in the main keeping busy with his writings. During the early school years at Tech, your secretary was fortunate to have had the personal acquaintance of these two illustrious twin brothers, both of Course I, 1895.

Louis A. Abbot, Course II, has moved from South Duxbury, Mass. to Clear-

water, Fla. His address at present is General Delivery.

We regretfully record in our necrology records the passing of Perley Fred Gilbert, Course IV, on last May 5th, 1956, at his home in Andover, Mass. He was in his 88th year. Widely known in architectural circles throughout this region, Gilbert was a native of St. Johnsbury, Vt. He was graduated from Philips Andover (1890) and Technology in 1895. Since his graduation he has played a prominent role in architecture, and for many years the concern he founded was located in the old Central Block, Lowell, Mass., which was destroyed in the memorial St. Patrick's Night fire of 1955. The present firm which he organized is located in the Sun Building. In 1896 Gilbert joined the firm of Merrill and Cutler, Lowell, one of the oldest and largest concerns of architects in the country at that time, becoming a partner in 1901. In 1909, upon the death of Cutler, the firm became Merrill and Gilbert until 1915, when upon the death of Merrill, it became Gilbert and Clark. In 1919, when Clark passed away, that Gilbert founded the Gilbert Associates. Gilbert was one of the architects of the famed resort Wentworth-by-the-Sea, N. H. He served as consulting architect for the \$20,000,000 Shawsheen Village project of the American Woolen Company. His firm won wide recognition as the architects of 500 schools throughout this section of the country. Gilbert's reply to his years at Technology was, "Tech has supplied me with what I have been unable to find in practical experiences."

Last June we received an interesting letter from Judson Dickerman of Charlottesville, Va. He reports he is building — at his age — a new house on the basis of convenience and compactness for living, yet views with some alarm the task of installing a new garden at the new site. His daughter, Eleanor, was graduated from Bryn-Mawr College in June this year. He also reports a new granddaughter — one year old. Judson's letters always seem to express his usual optimistic enthusiasm for living. — LUTHER K. YODER, *Secretary*, 69 Pleasant Street, Ayer, Mass.

1896

At the sixtieth reunion of the Class of M.I.T. '96 at DuPont Court on June 11, 1956, a duly notified meeting was held and the following letter was read: "Dear Fellow Classmates; The affairs of M.I.T. Class of '96 have been chronicled since Charlie's passing by your two present officers. 'Time and tide wait for no man.' We have served the Class with pleasure during these eight years and trust our omissions have been few. We feel that the time has arrived for a new setup as our physical defense seems unwilling to carry on. Fred and I both experienced punishing attacks upon our ability to accomplish our daily routines and herewith submit, after careful consideration, the following suggestions. We have discussed the issue with Henry Hedge and James Driscoll. We all four realize that from here on the class affairs must be directed by a new class representative. Fred and I will turn over our class materials to

whomever you may elect to succeed us. Mr. Severance is fully qualified to supply any information needed regarding the general routine of Alumni affairs.

"Since our alumni gathering we have lost six classmates. On June 22, 1955, Augustus J. Bowie; July 14, 1955, Henry A. Sherman; October 17, 1955, Herman Von Holst; October 25, 1955, Henry A. Waterman; March 3, 1956, Leon W. Mansur; March 4, 1956, Ada E. Daniels. This leaves ninety-eight living members.

"Financial Statement, May 31, 1956, from Cambridge Trust Co. Benevolent Fund; \$1393.27, deposited June 1, 1956. Jameson legacy: \$462.50. General Fund: \$234.11. Total to June 11, 1956: \$1855.77.

"We wish to acknowledge our appreciation for the services rendered by any of our classmates and still stand ready to serve if required. (signed) John A. Rockwell Sec'y, Frederick W. Damon, Asst. Sec'y." It was voted that the resignations be regretfully accepted. "We wish to express to you both the highest esteem of your services to the class and its gratitude for your untiring devotion to its interests. The Technology Review never failed to furnish '96 notes telling of the various happenings to the members of the class. You were the only contact many had with the Institute; no letter went unanswered and requested action was accomplished when possible.

"God bless you both and may you be spared to answer the calls which the Class will still want to make upon you. (signed) Attie Lawrence Gates, Joseph Harrington, Myron E. Pierce, Walter Otis Pennell, Samuel Tupper Smetters, Robert Allen Davis, Herman Charles Lythgoe, Frederick Taylor Rundlet, Karl Almon Pauly, Albert Hubbard Spahr, James M. Driscoll, Henry R. Hedge."

James M. Driscoll was elected secretary and Henry R. Hedge assistant secretary. Word was received from Bakenhus, Coolidge, Fuller, Haseltine, Hewins, Hyde and Jacobs that they could not be present but wished to be remembered to their classmates. Louis S. Morse died July 11, 1956, at York, Pa. He was an authority in his field of refrigerating engineering. His son, Louis Jr., attending his own 25th reunion, came to our '96 table and conveyed his father's compliments to the Class.

On page 74 of the class history is a picture of Grush, Rockwell, Locke and Hersey who never missed a reunion. John Rockwell, last of the four, missed this reunion thru illness, but it is hoped he will be able to attend next year.

Charlie Hyde called on John Rockwell on his return from Hanover where his son-in-law celebrated his 30th reunion. John says that Charlie is full of energy and keeping up his professional duties. He is held in high esteem by sanitary engineers.

John suggests that many of the Class find their contacts with the Institute enhanced through the medium of class notes, and suggests that the members send his successor material of class interest. — JAMES M. DRISCOLL, *Secretary*, 129 Walnut Street, Brookline 46, Mass. Henry R. Hedge, *Assistant Secretary*, 105 Rockwood Street, Brookline 46, Mass.

An outstanding member of our Class and one whose ingenuity and ability led to his recognition by his professional and business associates as an engineer of distinction is Thomas R. Weymouth. He is well-known to all our members because of his continuous interest in the Class, evidenced by his faithful attendance at our reunions and his helpful assistance in all matters concerning the Class over these many years. He writes as follows under date of May 16, 1956, from his home at 930 Park Avenue, New York, for which we express due appreciation: "Here is the fulfillment of a promise I made to George Wadleigh over a year ago. I am attempting to hit those high points of my career which I think might be of some interest to the surviving members of the Class we are all so proud of."

"My first job after graduation was as a laborer with the Metropolitan Street Railway in New York City, and in this capacity I participated in the conversion of the cable cars to electric trolley cars, my role being to make up by hand the electric cables required to connect the controller boxes at the two end platforms of the cars with the motor on the axle. Thus I witnessed the complete cycle of an era in electrical transportation which flourished for over 50 years and which today has passed completely out of existence. Following this experience, I spent about four years in the design and construction of hydroelectric power plants in Canada and the United States at a time when a voltage of 30,000 was considered very high. It was during this period that I was thrown in contact with such men as Mer-shon, Scott, and Lamme, about whose achievements in electrical discovery we in Course VI read with such reverence during our days at Tech."

"In 1903, I made a bold plunge into the natural gas and oil fields, the engineering requirements of which covered a broader field than that of the electrical course in which I had been trained. As there was very little published engineering information dealing specifically with the problems of this industry, I was compelled to supplement the meagre data available from my college text books and the few engineering handbooks then in existence with a large amount of research work on the transmission, compression, and large scale measurement of natural gas. The results of these investigations were embodied in two papers presented to the American Society of Mechanical Engineers in 1912, entitled "Problems in Natural Gas Engineering" and "Measurement of Natural Gas." The transmission formula, known to all natural gas men as the "Weymouth Formula" received the endorsement of the U. S. Bureau of Mines after a five-year investigation of the major natural gas pipe lines in the United States, and my orifice meter formula was shown to be substantially correct within less than two per cent after a ten-year investigation of such meters by the U. S. Bureau of Standards in co-operation with the A.G.A. and the A.S.M.E."

"After the dissolution of the Standard Oil Company around 1912, my lot fell to looking after the engineering interests of

the National Fuel Gas Company and its subsidiaries — the United National Gas Company of Oil City, Pa., the Pennsylvania Gas Company of Warren, Pa., and the Iroquois Gas Corporation of Buffalo, N. Y., and it was in this capacity that in 1916 I had a part in establishing for the Iroquois Company what I believe to have been the first successful natural gas field underground storage project in the country.

"In 1923 my duties took on more of an executive character when I was transferred to the Presidency of the Iroquois Company in Buffalo. There I effected a merger of the Iroquois natural gas system with the newly purchased manufactured gas system of the old Buffalo Gas Company."

"In 1928 I went to Tulsa, Okla., as President of the Oklahoma Natural Gas Corporation and its parent, the American Natural Gas Company. After two and a half years in this job, I migrated to New York to become Vice President of the Columbia Gas & Electric Company — now the Columbia Gas System. While in this position I frequently had the pleasure of calls from Jack Ilsley. In 1941, at the age of 65, I retired from active participation in the gas industry, except for a few occasional consulting jobs which I do not permit to interfere with my hobbies. From the year 1911 until my retirement I was very active in the American Gas Association, having been Co-chairman of the Technical and Research Committee and Chairman of the Gas Measurement Committee from the time of their organization, which I helped to effect, and in 1941 I received the Charles A. Munroe Award of the A.G.A. "for the most outstanding recent contribution by an individual to the advancement of the Gas Industry." I was once a Vice President of the A.S.M.E. and for many years have been a Fellow of that Society. I am also a member of the M.I.T. Club of New York."

"In the early 1920's I served as a member of a Board of Arbitration in a rate dispute between the Board of Public Utilities of Alberta, Canada, and the natural gas company serving Calgary. From 1941 to 1945 I served as Natural Gas Consultant of the Petroleum Administration for War in Washington, during which period my duties carried me from coast to coast and from the Gulf of Mexico into Canada to tackle unruly problems badly needing practical solution in furtherance of the war effort, one of which, in Alberta, involved my being loaned by the U.S. Government to that of Canada. While in Washington during these years I had several interesting sessions with Proctor Dougherty and some of the other Tech men living there then."

"Since my retirement, I spend my time in the indulgence of several interesting hobbies including sculpturing, painting, photography, music, and sailing. For years I was an ardent golf enthusiast, but this ended about 12 years ago when I became a victim of rheumatoid arthritis which put an effective end to my ambition to 'shoot my age' which I had cherished for so long. I became a guinea pig in the first treatments of arthritis by cortisone, which, with its succession of improved forms, has kept me in active circulation ever since,

and I am still continuing as a laboratory specimen. I live in New York for seven months during the winter and the remainder of the year is spent at Bemus Point, N.Y., on Lake Chautauqua, where I have all of the facilities for indulging in my several hobbies. While in New York, I see more of George Wadleigh than of any other member of the class, and in driving back and forth between New York and Bemus Point during the summer I frequently visit with Charlie Dunn in Lock Haven, Pa., which is our native heath."

We have been notified that during the month of June, Warren H. Barnes registered two new addresses: 1633 38th Street, Sacramento, and 1386 E. Valley Road, Santa Barbara. His previous address had been Oakland, Calif.

Everyone has doubtless received a description of M.I.T.'s recent acquisition in the form of Endicott House. It is the gift of H. Wendell Endicott, formerly of Endicott, Johnson Company, and consists of a large residence of the French Chateau type, and, in addition, a small house, located in Dedham on 20 acres of ground with swimming pool, tennis court, and beautiful gardens. At present it is principally used for meetings of Technology committees, conferences, and seminars. The restaurant is operated at reasonable prices, but unfortunately our experience has been that having tried on more than one occasion to take a small group to luncheon or dinner, it has been at a time when all their facilities were fully occupied. This of course would not always be the case.

The select group known as "Under 21 Club" consisting of those members of the Class who graduated before reaching majority has a new member. Gilbert H. Pratt, Course V, was born June 30, 1876, so he just gets under the wire. He writes from Annisquam, Mass., "Surely hope we have a 60th get-together of some kind."

The Alumni Office has notified us of the death of Frederick John Hemmings, S.B., Course V. He had been retired from business for many years. Funeral was held on July 26 at Davis Funeral Home, 89 Walnut Avenue, Roxbury. Flowers were sent on behalf of the Class.

At the luncheon on Alumni Day the "old faithfuls" listed below sat together and enjoyed the usual sustenance for the inner man, and more stimulating thoughts from President Killian and others: William Binley, Luzerne S. Cowles, Jere R. and Mrs. Daniell, Walter Humphreys, John P. Ilsley. Four of the group stayed for the evening celebration consisting of a cocktail party on the lawn, dinner in Rockwell Cage, and a lucky number contest afterward. This at least offered a variety from the usual program.

Ralph A. Bowen, Course V, died June 25, 1956. The following is from the North Adams Transcript: "Committal services for Ralph A. Bowen, 80, of Boston, formerly of Adams, were held this morning at 11 o'clock at the family lot in Maple Street cemetery. The Reverend L. Edgar Stone, Jr., pastor of the First Baptist Church, officiated. Mr. Bowen died Monday evening at the Boston City Hospital after an extended illness. A native of Adams, Mr. Bowen was graduated from

Adams High School and from M.I.T. He had resided in Boston, where he was engaged in the chemical and dye manufacturing business since his departure from Adams over 60 years ago. A sister, Mrs. Arthur C. Simmons of 4 Melrose Street, is the sole survivor." — JOHN P. ILSLEY, *Secretary Pro-tem*, 26 Columbine Road, Milton 87, Mass.

1898

Second call for the 60th. No Get-Together to plan for the 60th was held at the Algonquin Club on Alumni Day, June 11, 1956. The reasons: At the date planned for mailing the card announcing the Get-Together, the secretary was in Europe, and President Dan Edgerly was temporarily indisposed by a physical ailment, which also prevented his coming east for Alumni Day and the '98 Get-Together. Keep your eyes peeled for special letters and/or class notes concerning the 60th.

Class of 1898 was represented at some of the features of Alumni Day, 1956, though in less numbers than usual. We were glad to welcome certain wives of classmates who had recently passed on. We will suggest that this is a pleasing practice, which might well become a tradition in the Class. There were present at Alumni Day Luncheon in the Du Pont Court Mrs. Elliot R. Barker, Mrs. Arthur A. Blanchard, Marion and Edward Chapin, George Cottle and friend, Mrs. (Professor) James Jack, Fred Dawes, Lester Gardner, Carl High, Ernest Russ, and Paul Wesson. At the Alumni Banquet in the evening, held at the Rockwell Cage, there were present Mrs. Arthur Blanchard, Marion and Edward Chapin, Fred Dawes, Lester Gardner and Paul Wesson. And listen! Paul Wesson drew a fine typewriter as a prize. Congratulations, Paul. How did you do it?

The description of the various features of Alumni Day, contained in the July, 1956 Review, is very complete and will repay re-reading, especially the papers presented at the morning symposium on Science and the Health of Mankind, and President Killian's address.

The duo presidents of '98, Dan Edgerly and Lester Gardner, in the absence of the Secretary on trips, have been cooperating effectively in the supplying of information and items of interest to the Class. President Daniel Edgerly filled the gap in Class News in July with Class Letter No. 17. Thanks, Dan, for myself and the Class. This was all the more timely, as in the Spring of 1956, the Class suffered the loss of two classmates, Elliot Barker and Arthur Blanchard, who have for years been extremely helpful to the Secretary.

Elliot, as Assistant Secretary of the Class, was always quick to jump to the bat, when the Secretary was away on trips. Arthur, my predecessor as Secretary, after serving the Class for twenty-five years as Class Secretary, during which he supervised the compiling of two Reunion booklets, the 25th and 35th, was always willing and glad to help the present incumbent with his experienced and penetrating judgment on '98 and M.I.T. subjects and situations. We expect in due course to be able to furnish the Class with

further information concerning these classmates and others listed in Class Letter No. 17.

Lester also has been extremely helpful and cooperative. He recently sent us a note with clippings from the New York Times concerning our classmate, Alfred H. Caspary. Lester wrote: "Our classmate, Alfred H. Caspary, who died in 1955, left his large fortune, estimated at \$10-15,000,000 to be distributed by his executor. Before his death, he had endowed a clinic in memory of his wife. Recently his estate gave the New York Woman's League \$3,000,000 to establish a research centre for the study of the diseases of pet animals. Caspary left a large collection of stamps, which is valued at \$3,000,000. It is being sold in parts by H. R. Harmer, Inc., New York, in sixteen auctions to cover a period of several years. The second sale brought \$225,340; the third section, \$234,699; and the fourth section, \$954,351."

We quote from the New York Times, in addition, as follows: "\$14,000 Cover — An envelope which went through the mails in 1845 from Baltimore to Annapolis for ten cents realized \$14,000 when publicly sold here last week by H. R. Harmer, Inc., auctioneers. The Baltimore cover is one of the United States postal classics." Another quotation: "4 Stamps Bring \$7,000, German Part of Caspary Sale Yields Total of \$954,351. The first four of sixteen auctions of the stamp collection of the late Alfred H. Caspary, New York stock broker, was completed yesterday by H. R. Harmer, Inc., stamp auctioneers. The highest price paid was \$7,000 for a block of four unused 1851 Saxony three-pfennig stamps. A Leuback cover with a block of four 1862 half-schilling stamps went for \$6,750. The auctions of the old German state part of the collection brought \$954,351."

Thanks, Lester, for myself and for the Class; and gentle reader, we have considerable material concerning the honoring of Lester on the occasion of his recent eightieth birthday, which will interest and be included in future Class Notes.

We regret to report the passing of two classmates: Elwell R. Butterworth, January 29, 1956 and Albert W. Tucker, July 1, 1956. This is in addition to a considerable list, given at the end of Class Letter No. 17. We regret to report that the Class has also suffered the loss of two wives, who were always helpful. Mrs. Marion Lansingh, the wife of our former president, and Mrs. Grace Babson, wife of Roger Babson. The Class of '98 will remember with deep appreciation Grace Babson's gracious courtesy as hostess on the occasion of our 50th and 55th Reunions. Despite all the losses, perhaps because of them, we must close ranks and cooperate more closely and effectively as a Class of M.I.T.

New addresses: Howard J. Benson, 41 Kennebec Avenue, Long Beach 3, Calif.; David H. Blossom, Box 1032, Anna Maria, Fla.; Abram French, General Delivery, Bath, Pa.; Joseph C. Riley, 518 Great Plain Avenue, Needham 92, Mass.; Ernest F. Russ, 20 Johnson Street, Ashland, Mass.; William R. Strickland, 300 Lincoln Street, Detroit 30, Mich. Remember the 60th, June, 1958. — EDWARD S.

CHAPIN, *Secretary*, 2 Gregory Street, Marblehead, Mass.

1899

Everything conspired to make the Class Alumni Day one of the best the Class has ever had, excepting the five year reunions. The weather was perfect, for the rhododendrons on the campus were at full bloom, making the Class luncheon ideal. The members of the class attending the luncheon were: Glover, Kinsman, Packard, Rickards, Schmidt, Sherill, Skinner, Watkins, Harry White, and Witherill. (The question arises why the last half of the alphabet is always in the majority.) All classes out 50 years or more had tables near the platform and were served by waitresses; innovations greatly appreciated by those afflicted with the infirmities of old age. The fair sex was represented by Mrs. Kinsman, Mrs. Skinner, and Mrs. White; and Packard brought Mrs. Stone of Hull, Mass. Hull, on the shores of Massachusetts Bay, is where Ed lives during the summer months.

The Annual Banquet held in the Rockwell Field House brought out Kinsman and wife, Sherill, Skinner and wife, Rickards, Watkins, and Witherill. The roominess of the Cage and the change from set speeches to entertainment and prizes was regarded as welcome, as was the fact that all activities of the day were held on the campus.

Miles Sherill was honored by being invited to attend the festivities of the 25 year class, as were all the other professors of the class of a quarter century ago.

A handwritten letter was recently received from Dudley Pray. V. Mynson and I spent quite some time trying to decipher it. I shall probably have to call on the services of Charles Schmidt, V, handwriting expert, who made a national reputation in the Hauptmann-Lindbergh case. I know of but one other person with worse handwriting — myself. That's why I use a typewriter and occasionally strike the right keys.

A letter from Frank Hermanns from Bronxville made me realize that we were not many miles apart. So I planned to look him up when I was in that vicinity, but the very day I had to go to that municipality to see an oculist, I received a notice from M.I.T. that he had moved to Rye, N.Y. However, I had a long chat with him on the 'phone. He is a Cape Codder in the summer time.

Through the courtesy of Obie Denison, Hervey Skinner, and others, I received clippings regarding the death, on June 26, of Walter R. Bean of Braintree, Mass. Before he retired, he was a naval architect at the Fore River Shipyard at Quincy, Mass., where many naval vessels are built. He was with the New York Ship Building Company at Camden, N.J., up to 1930. He leaves two sons and a sister.

Charles D. Drew, who retired ten years ago, reports that he is having a wonderful time, is moderately active, and takes great satisfaction in watching six grandchildren grow up.

Miles Sherill is upholding his reputation as a long distance traveler. Last year I reported in this column on his long trip

through Europe and the Middle East with Professor Coreyell of M.I.T., and the latter's family. During the war years, the latter was stationed at Oak Ridge. In May of this year, he took his family to visit friends there, and Miles was thus able to visit the Oak Ridge National Laboratories and get a good idea of what went on during the war years and since. Following this unusual opportunity, Miles flew to Knoxville, Tenn., via Washington, D.C. From Knoxville he flew to Pittsburgh, and thence to Dayton, Ohio, Buffalo, N.Y., and home. You are a wonder, Miles, and are to be congratulated on your mobility.

—BURT R. RICKARDS, *Secretary*, 173 Edgewood Avenue, Pleasantville, N.Y.
MILES S. RICHMOND, *Assistant Secretary*, Little Compton, R.I.

1900

Our annual reunion at The Pines was about the most enjoyable that we have held. Perhaps this is because about the same ones attend each year and we become better and better acquainted. Those present this year were: George and Estelle Atwood, Stanley Fitch, Bill and Louise Hart, Minnie Lawley, Aleck and Alice Newhall, Jim and Harriet Patch, Charlie and Elsie Smith, Arthur Walworth, Percy Ziegler, and Elbert and Lou Allen. We had a telegram from Harry and Anne Thayer saying that they were delayed and could not reach Cotuit in time to join us. These annual reunions will continue. We do wish that more of the Class would attend.

The day before we went to The Pines was Alumni Day at the Institute in Cambridge. Conant, Fitch, Newhall, Smith, Stearns, and Ziegler, together with Minnie Lawley, Alice Newhall, and Elsie Smith, attended the luncheon and other festivities of the day.

Most of us will remember Philip Cooper who was our Freshman Class President. We have received a letter from Mrs. Cooper from which we extract the following: "My husband, Philip Benson Cooper, died on May 18, at the age of 76 years. He led a very active life in the field of architecture and air conditioning until, in August, 1947, his health broke down, and he had to retire from the business world. We spent seven months in San Marino and then came back East and settled in beautiful Baltimore County. He always kept active until a few days of his death, though his health was failing for some time. We have five married children, ten grandchildren, and nineteen great-grandchildren, and we have been very proud of our clan. I have always wanted my husband to write a sketch of his life for his children, for he could have told so many interesting anecdotes, not only of his life, but of the Navy, as he was a Navy Junior. His father was the late Rear Admiral Philip H. Cooper. But I could not persuade him to do it."

We have received an announcement of the death of Gerald Frink. Your secretary called on Gerald about a year ago and spent an interesting hour with him, going over the plant of the Washington Iron Works, of which he was President. His son, Philip, has sent us a brief account of Gerald's life, which follows: "Gerald

Frink was born in the town of Visalia, California, July 28, 1875; father—John M. Frink, mother—Hannah (Phillips). His mother died soon after his birth and John M. Frink came to Seattle. The latter, with L. H. Tenny, incorporated the Washington Iron Works, under the laws of the Territory of Washington in the year 1882, doing a general foundry and machine shop business.

In the year 1889, the Seattle fire completely destroyed the plant of the Washington Iron Works, but it was rebuilt in a comparatively short time. Mr. Gerald Frink began working in the machine shop and pattern shop of the firm in 1889, becoming a journeyman, and gained valuable experience in the employ of E. P. Allis Company of Milwaukee, and the Bucyrus-Erie Company. He attended M.I.T., receiving his degree in 1900. He went from superintendent of the Washington Iron Works through various promotions, and upon the death of J. M. Frink, became the president of the firm on September 5, 1914. He held that position until his death on July 10, 1956. Although the Washington Iron Works has always been associated with the logging trade, it has diversified its work considerably. In 1921, it began the manufacture of gold dredges, and during World War II produced hundreds of cranes for shipyards and various items for Boeing Airplane Company of Seattle and Wichita.

Mr. Gerald Frink was also associated in the Stetson-Ross Machine Company of Seattle. In this company's reorganization of 1930, he became vice president and chairman of the board. In 1953, he was made president upon the death of W. T. Pritchard, which position he held until a change of ownership in the fall of 1955. This company is the leading manufacturer of lumber-mill planers and other mill machinery. He was a member of the Ranier, Arctic, and Seattle Golf and Country Clubs. He married Cora W. Smith in 1901, and they have two sons, James H., and Phillip F., and one daughter, Mrs. J. W. Rice."

We have just received word of the death of Clifford M. Leonard on September 9, and we will have more about him in the next issue.

Harry and Anne Thayer have spent the summer at the home of their son, Laurence, in Osterville on Cape Cod. But it has been rather a sad summer, for Laurence has been an invalid. We have just learned that he passed away on September 11. Harry and his wife have visited us at our reunions in Cotuit several times. We extend our deepest sympathy to his family. —ELBERT G. ALLEN, *Secretary*, 11 Richfield Road, West Newton 65, Mass.

1901

It is indeed sad that our class notes for this year have to start with unpleasant news. On July 20, Langdon Pearse passed away at his home in Winnetka, Ill. He was one of the speakers at our 55th reunion and appeared to be in good health. He was born in Boston 78 years ago, graduated from the Roxbury Latin School and received his A.B. from Harvard, summa cum laude, in 1899. He re-

ceived his S.B. degree from M.I.T. in 1901, and his S.M. degree in 1902. He was a member of a number of civil engineering societies and an honorary fellow of the Institute of Sanitary Engineers, London. He was an honorary member of the Central States Sewage Works Association, and a fellow of the American Public Health Association and the Academy of Arts and Sciences. For the first five years of his engineering work, he engaged in various civil engineering connections leading to employment on the water and sewage systems of Columbus, Ohio, and Oakland, Calif. In February, 1909, he entered the employ of the Sanitary District of Chicago as assistant engineer. He organized and carried through the program of research which led to the development of principles of sanitary engineering which became the basis on which the present Chicago and suburban system is served. He was the author of many technical reports and publications. He is survived by his widow. He was a member of our Class who will be greatly missed.

I have just received word of the death of Clarence L. Brown, IV, of Haddon Heights, N.J., on August 24 after a week in the hospital. He retired in 1950 after being employed for 25 years as a construction engineer. He is survived by his widow, two sons, and a daughter.

The following class replies were received last spring but did not get into the class notes. A letter from Roger Wight, written in February, said that he hoped to be at the 55th reunion but it was doubtful on account of his wife's broken hip, which had improved so that she was able to get around with a cane. They were not able to come to the reunion. He is still in the real estate business and apparently enjoys it. Ralph Robinson reported in March that his wife died unexpectedly in September, 1955. He was living alone in Fort Lauderdale. He is still an honorary secretary for M.I.T. He made a trip to Paris in April to visit his son. He will return to Florida in the fall. Dennis Haley, III, in New York City, writes: "Still very active as a mining engineering consultant. I do considerable traveling in connection with the job. Still do the things I always did (or at least most of them). I had three nice weeks under the coconut groves in Barbados. My daughter came over from Caracas. I, with another mining engineer, had a very pleasant time. A beach only 50 yards away and an excellent bar about the same distance. What more is necessary?" Robert E. Bruce, special, from California: "I hold no degree from M.I.T.; only from B.U. and Harvard. My courses at M.I.T. were given in the old buildings on Boylston Street, Boston. I remember working under Cross, Derr and Pope." J. P. Catlin, VI, writes: "In 1947 I was retired as vice-president of the Wood Newspaper Machinery Corporation in Plainfield, N.J. Since 1947 I have devoted my time as president of the Virkotype Corporation, Plainfield. This company is the largest manufacturer of raised printing machines, compounds, and inks. I spend four months in Florida, and when in Plainfield go to work at 7:00 A.M. and leave at 6:00 P.M. Some hours! I can get away with this as

my wife owns the business. I have a group of young men who have been with me for 25 years, who run the business. My job is to watch the check book."

Up to September 1 I have received only 10 replies to the questionnaire about the next reunion. Does this mean that not many are interested? There have been about as many different ideas as there have been answers. — THEODORE H. TAFT, *Secretary*, Box 124, Jaffrey, N.H. WIL-
LARD W. Dow, *Assistant Secretary*, 78 Elm Street, Cohasset, Mass.

1902

• Alumni Day was an extremely pleasant affair but brought out but few of our class — Collier and Mrs. Collier, Dan Patch, Philbrick, Bob Williams and Mrs. Williams. However, considerable news has come in by letter and through Collier, who, with Mrs. Collier, made an auto trip to Chicago last spring and sent in the following for Class Notes: "I thought you might like a little news item for your 1902 column, so give you the following: The middle of April, Mrs. Collier and I thought we would like some sort of spring vacation, so we packed luggage in the car and set off for Chicago. I had a cousin out there whom we had not seen for five years and a few classmates I wished to see on the way. We looked for nice spring-like weather but admit we did not get too much of it. However, we had a good time, saw a lot, and made about four weeks of it.

"Cutting across upper Pennsylvania, we stopped to see the Drake well at Titusville, that shrine to the great oil industry. In connection with the well there is a very fine museum filled with articles and mementoes relating to the pioneer days of Titusville, Oil City, and Pithole City, the latter a town that went from nothing to 15,000 population and back to nothing as the wells gave out. Pictures shown of those early days were most interesting, and in contrast to the methods and tools of today would seem to be a thousand years back instead of but a hundred years.

"In Cleveland, I made it a point to call on Clarence M. Allen of Gates Mills, which is on the outskirts of Cleveland. The amusing thing in this case was the fact that my wife had been in contact with the Allens for years, since her father, who was a representative of the Brown and Sharpe Company of Providence, frequently made trips to the West and would make business calls upon Allen who was in the machine tool business. Each year Christmas cards would go back and forth, and yet I never surmised that they went to a 1902 M.I.T. graduate. We found Clarence and wife at home, both apparently very well and looking forward to summer. This we could understand as they have a nice home with spacious grounds that in summer time could certainly grow much that is beautiful. Gates Mills is a community of fine homes, nice grounds, plenty of trees and no sign of any manufacturing to spoil the natural beauty. Allen told me that he was still active in connection with the Cleveland office of his company, the C. G. Allen Company of Barre, Mass., of which he is

still president, I believe. His son is in charge of the shop at Barre.

"We then went to Columbus, Ohio, and after a short stay, to Bellefontaine to inquire about a cousin who had died early in April. Then to Dayton, Ohio, where we put up at the Biltmore for two days. Here I called on our 1902 classmates, Harry Canby and Frank Smith. Harry had moved from his spacious and lovely home of five years ago to the other side of the city. Since his family was all grown up and married he moved to smaller quarters. Located on Thurston Boulevard he occupies a very fine house. We found both Harry and Mrs. Canby very well. Mr. Canby retired from his business a few years ago, sold out. Last year he made a trip to Europe which is work for any one to do, so I am going to report him as fit. I always felt very friendly with the Canby family, since a sort of family relationship existed, both he and I being second cousins to the woman who lived in Bellefontaine.

"We found Frank Smith at home on Thurston Boulevard. He still heads up the Hillsmith and Company, and is very active in its affairs. It again seemed good to find 1902 men still carrying on. I believe his concern is doing a large construction business in Dayton and thereabouts. Frank H. Smith occupies a large and beautiful home, one he built in 1911, if I remember rightly. He has many fine paintings there — some representing work his father had done, for he was a well-known artist in his day.

"From Dayton we went to Cincinnati for a few days and there called upon friends. On the way at Miamisburg had a chance to see one of the mounds built by the old mound builders, something I had failed to find on my other trips to Ohio. From Chicago, we stayed a few days in Evanston, as this town was the home of my cousin. While there, I made a point to call at the home of Harold Curry, for five years ago I had made a visit. This time I was surprised to learn from his daughter who occupies the house that he had gone to Florida and was making St. Petersburg his permanent home. His address is given as 441 Third Street, South. He had moved three years ago. I was disappointed in missing him since he and I were most friendly while at Tech.

"We arrived home after being away about four weeks. Saw a lot that was new, and best of all, met many whom we wished to see, all most kind and friendly."

A letter received by Collier from Smith supplements the above: "Your letter of the 21st requesting an autobiography. This would be a ghastly thing to consider, something I have never indulged in and I am afraid it might seem like an Horatio Alger story. However, it is sufficient to say that after 55 years I find the various companies on this letterhead (Frank Hill Smith, Engineers, N.Y.; The First Street Garage Company, Dayton; The Van Cleve Hotel Company, Dayton; Forty-Third Street Warehouse Company, Pittsburgh and Toledo; The Dayton Hydraulic Company; The Mad River Securities Company, Dayton; Hillsmith and Company, Engineers; 81 Pinckney Street Trust, Boston) hung around my neck. Of which The Hydraulic Company is one of

the oldest power companies in the country, formed some 120 years ago on land grants from James Madison in 1812, and James Monroe in 1820. It was used as a feeder for the Miami and Erie Canal (Toledo to Cincinnati), then building."

In response to a letter from Farley Gannett, George Mather writes: "What a pleasant surprise it was to receive your letter telling the main features of your life to date. Now I will try to do a similar job with my history, giving you the high spots. The idea of entering in regular municipal engineering work was abandoned when I found out that politics prevailed to a considerable extent, so I shied away from sanitary engineering and went with Western Electric. There I began to absorb some of the information relating to design, manufacture, and use of telephone apparatus.

"The big event of the early years was my marriage to Mary Carpenter in 1903. She is still with me, thank God.

"In 1913, I was offered a job as chief engineer for the Puerto Rico Telephone Company. I took the job for two years and by that time the climate was having a bad effect on the family, so we went to Vermont and leased a farm with stock and tools and ran it for a year, getting back our red blood. Returning to the Western Electric Company in 1916, I was sent in 1920 to the Far East to straighten out some difficulties in the operation of telephone equipment in Singapore and Calcutta. Then came the sound movies, and a few years work in standardizing the systems and apparatus for the recording of sound and its subsequent reproduction in connection with moving pictures. Then along came the Company Pension System and eventually our move to sunny Florida. This is indeed a lazy life, and the years pass by without a struggle. I expect that you are so thoroughly acclimated to the life in Harrisburg that you will never move to a kinder climate.

"We were blessed with two sons and five grandchildren; two boys and three girls. Our younger son was taken suddenly in 1951 with coronary thrombosis. Our older grandson is in Berkeley Seminary in New Haven preparing for the Episcopal Ministry. He expects to be married this coming June (1956) and has another year in the seminary before going to northern Michigan. Our younger grandson is in his third year at the University of Florida and headed toward dentistry. The three girls are doing nicely in school and live next street from us."

If you enjoy these letters from the boys you used to know, think how much more it would mean to meet them and talk over old times. There will be a chance at the celebration of our 55th, next June, plans for which are already in the making. It will be an "open" meeting in keeping with the times — that is, wives and family members are invited to attend. The date, which is set to combine with Alumni Day, will be June 7-10; the place, on the North Shore at The Wentworth-by-the-Sea at Portsmouth, N.H., about 60 miles north of Boston. Portsmouth is an old New England seaport with beautiful old homes and houses, and well worth visiting if at all interested in the architecture of our early days. The Wentworth itself is well known

for its hospitality and its setting, just outside Portsmouth in New Castle and is noted for its beauty. As planned, we would arrive at the Wentworth in time for the noon-day meal on Friday, the 7th and return to Cambridge for the Alumni Day events immediately after breakfast on Monday, the 10th. Expenses at the hotel would be very close to \$50 per person so far as can be reckoned at present. More information will be received by all who answer the reply postcard to be sent out in January. — BURTON G. PHILBRICK, *Secretary*, 18 Ocean Avenue, Salem, Mass.

1903

C. M. Joyce writes of taking a 2000-mile auto trip through Austria with Mrs. Joyce this summer, as follows:

"Some of our travel-minded classmates may be interested in our experience during a 2000-mile motor trip through Austria. After being rained out at Ambassador Aldrich's Independence Day reception in London, we flew to Zurich, and stayed at London Hotel near the airport. We were met by a car from Epper's Garage in Lucerne, driven by the same young woman who piloted us through the Rhine Valley last summer. She made all hotel reservations and took us by the immigration officers. All I did was to endorse American Express checks."

George H. Clark, a pioneer in wireless telegraphy, and for 27 years associated with the Radio Corporation of America, died on June 3 at his home, 349 East 49th Street after a long illness. His age was 75. Mr. Clark retired in 1946, after having served since 1931 as custodian of historical archives for R.C.A. He joined R.C.A. in 1919, when the newly formed corporation acquired the Marconi Wireless Telegraph Company of America. He had been affiliated with Marconi following pioneer wireless service with the Navy during World War I. From 1919 to 1931 Mr. Clark was manager of the R.C.A. exhibit division. He organized and directed the operations of an exposition that toured the nation. As custodian of historical archives, he collected and catalogued files of early radio companies, photographs, blueprints and similar matter concerning radio pioneers. In 1952, this "R.C.A.-Clark Collection of Radioana" was presented by R.C.A. to his alma mater, M.I.T. Mr. Clark was the author of biographies of Roy A. Weagant, early radio engineer, and John Stone Stone, radio inventor and engineer. Born on February 15, 1881, at Alberton, Prince Edward Island, Mr. Clark came to the United States with his parents at the age of 14. He received his high school education at Everett, Mass., and worked summers as a telegraph operator for the Boston and Maine Railroad. After graduation from M.I.T. with an S.B. in 1903, he went to work for the Stone Telegraph and Telephone Co. in Boston. From 1908 until after World War I, he served as a civilian assistant to the Navy as "sub-inspector of wireless telegraph stations" and as "expert radio aide." In 1912, he had received Government License No. 2 for commercial wireless operators. Mr. Clark was a founder and former president of the Veteran Wireless Operators Association. Surviving are a

son, Gilbert, of Los Angeles, and a daughter, Mrs. Edna Van Cott, of Patchogue, L.I.

Your secretary wishes to acknowledge with thanks the many letters of appreciation he has received since assuming his new duties. The class owes a great debt of gratitude to James A. Cushman for his long and faithful services as secretary and deeply regrets his untimely passing.

In more happy vein, a report of special tribute to Howard S. Morse, Chairman of the Board of the Indianapolis Water Company, has been received. A new reservoir, impounding the waters of Cicero and Hinkle Creeks, has been named in his honor. Morse Reservoir, begun under his direction in 1953 and completed in 1955, has a shore line of 32 miles and holds approximately 7 billion gallons of water, insuring abundant reserve water supply for the City of Indianapolis. A dedication program was presented July 31, 1956, by the Water Company, a feature of which was the unveiling of a plaque bearing his name by his two grandchildren, Scott and Kent Morse, and inscribed: "In recognition of his significant contribution to the growth of Indianapolis and the surrounding area, this reservoir exemplifies his vision and leadership as Chief Executive Officer of the Indianapolis Water Company for more than three decades." Congratulations, Howard. — LEROY B. GOULD, *Secretary*, 36 Oxford Road, Newton Centre, 59, Mass. F. A. EUSTIS, *Treasurer*, 131 State Street, Boston 9, Mass.

1904

As the time for submitting notes for the November issue is at hand, let me first express the hope that you have all passed a comfortable summer with a nice period of rest and relaxation, called a "vacation," somewhere during the period. As is usual, I suffer from a dearth of material from which to extract a reasonably good set of notes.

Personally, I am about the same in health as when I wrote the latest set of notes for the July issue, and I hope you are all at least the same. As these notes are written on September 13, much may happen before you read them in November, but as of now, Dan Sutton and Gus Munster are feeling much better than they did some time ago. So I hope they have continued to improve until you read these words.

In going over some correspondence, I found the following letter from A. D. Smith, which has laid dormant for nearly a year, so I give it to you now with overdue apologies. Smith writes from 1065 Broughton, N.W., Orangeburg, S.C.; and Skowronski's address is, International Refining and Smelting Company, Perth Amboy, N.J., in case any of you wish to heed Smith's appeal and write to Skowronski. "Stan Skowronski, V, whom I had not seen for over 40 years, called at my summer home in Harwich Port, Mass., in September, and we had a most pleasant get-together. He was looking well, had entirely recovered from his trouble that prevented him from attending the 50th reunion and vowed he would be on hand Alumni Day in '56. Stan is a world recog-

nized authority on copper refining and has been called as an expert to many localities in Europe and South America. As I also had worked abroad for several years, we especially enjoyed comparing experiences and impressions of different countries we had visited. I envy Stan a little, in that he is still fully active in his profession, while I was semi-retired this June. Would welcome hearing from any Course V man; better, a personal visit. Farrell, Marston, Whipple, E. W. White — how about it?"

We have this month several notices of the passing of some of our members, and the latest records the death of Ralph H. Baker at Winthrop, Mass., on August 27, as told by the following letter from his daughter. As always, we regret the passing of one of our ever smaller-growing group. "Ralph H. Baker, 73, succumbed to a heart attack on Monday, August 27, at his home on Bartlett Road, Winthrop. Born in West Dennis, Mass., he was a graduate of M.I.T. in the Class of 1904. He had recently retired from a retail furniture business in Boston known as Page and Baker Company, of which he was co-owner for over 40 years. A long-time member of the Cottage Park Yacht Club in Winthrop, he enjoyed sailing in his youth. He leaves a wife, brother, daughter, son, and three grandchildren." (Signed) Lois A. McNaull, Mr. Baker's daughter.

Another of our members left us on July 3, 1956, as evidenced by the following clipping from the Boston *Herald* of July 5. He was Alden Glover Drew, who had been prominent in Plymouth affairs and was well known in that town and section. "Funeral services for Alden Glover Drew, 76, of Manomet, a lineal descendant of Priscilla and John Alden, will be held at the Manomet Congregational Church on Friday at 1:00 A.M. A member of one of Plymouth's oldest and most distinguished families, he died at a local hospital on Tuesday following an illness of several weeks." Originally from Boston, Mr. Drew prepared at Mechanic Arts High School prior to attending M.I.T. He was assistant registrar of elections at Boston for many years, as well as a member of the Plymouth draft board, town government representative, and president of the Manomet Library Association. He leaves his wife, Mrs. Octavia Drew, three nephews, and a niece.

I have received notice, but no details, of the deaths of the following classmates: Calvin P. Bascom, 530 North Union Boulevard, St. Louis 8, Mo., on May 29, 1955; Julius L. Hecht, 2044 Elmwood Avenue, Wilmette, Ill., on October 25, 1955; Roy D. Mailey, 58 Salem Street, Andover, Mass., on June 3, 1955; Lester A. Russell, 4612 Lakeside Drive, Dallas, Texas, on September 30, 1955; Percy A. Staples, Hershey Chocolate Corporation, Box 307, Hershey, Pa., on July 23, 1956; Edward E. Yeaton, 23 Nahant Place, Lynn, Mass.

Edward E. Yeaton died on May 29, 1956, as related in the following clipping from the Lynn *Item*. "Edward E. Yeaton, 73, of 23 Nahant Place, widely known *Item* staff reporter for nearly 40 years, died today at his home after a long illness. During his long career with *The Item*, he was assigned most of the time to the fire and police 'beat' and covered some of the

biggest crime and fire stories that took place in Lynn. He retired 13 years ago." Mr. Yeaton was director and organizer of the annual Greater Lynn Fair, and was also an enthusiastic gardener, and member of fraternal circles, including Damascus Lodge of Masons, Peter Woodland Lodge of the Knights of Pythias, and Bay State Lodge of Odd Fellows.

Under date of June 24, 1956, I received the following autobiographical letter from Charles O. Egerton, which is so interesting that I publish most of it here. Charlie need not worry at all because he did not win the coveted S.B. He is just as much a member of the Class of 1904 as any who did, and his communications and ideas are as much sought and longed for as any S.B. amongst us. I remember him very well as a highly skilled dancer in the "Grand Duke," the Tech show of our freshman year.

"I went to Detroit in June, 1905, and through an employment office, got a job as draftsman at the Olds Motor Works, for whom Howard E. Coffin was designing their first multi-cylinder car, and worked under H. E. C. during his succeeding years as vice-president of Thomas-Detroit, Chalmers and Hudson Motor Company until late 1915.

"One of his protégés at Hudson was the late Colonel J. G. Vincent, for whom in 1917, I went to work at the Packard Motor Car Company, where J. G. designed the 'Twin Six' and the 'Liberty' aero engines. 'Those were busy days, nights, Sundays, and holidays, but as I look back, I believe that those Liberty engines, crude as they now appear, were not an entirely negligible factor in winning World War I.

"After a six-year probationary period, I was able, on September 4, 1918, to induce Vena C. Scott, a widowed mother of a six year old son, to become Mrs. C. O. E. For the next 28 years, she brought unalloyed happiness into my life, while I worked; first at the Packard in Detroit, then for Rolls-Royce and Westinghouse in Springfield, Mass., and Lima, Ohio. September 4, 1946, robbed me of my most treasured wife, and having been retired by Westinghouse shortly before, I tried to find comfort in my hobby, by writing and illustrating a book on every known type of American steam locomotive, but have never succeeded in finding a publisher.

"Such are life's vicissitudes for an aging Yankee, but my physical health is still perfect, and although I live alone, I have much for which to be grateful, notably your interesting 'write ups' of my old acquaintances, like Frank Farnham, and 'Fammy' Rockwood." (Signed) Charles O. Egerton.

Under date of June 12, 1956, I received a little note from President Carle Hayward, giving the names of those present on June 11, on Tech Day. Present at the lunch were, Mr. and Mrs. Clarence Williams, Mr. and Mrs. Fred Farrell, Mr. and Mrs. Louis Bouscaren, Stan Skowronski, A. D. Smith, Gene Russell, and Mr. and Mrs. Carle Hayward. Present at dinner were, Mr. and Mrs. Clarence Williams, Stan Skowronski, Howard Moore, and Mr. and Mrs. Hayward, which I thought was a good turnout for the 50-year members. Carle enclosed a letter from Bernie

Blum, which I give you below, and which indicates that all of us are not 100 per cent retired. "We have been away since your presidential letter arrived, and as we arrived home, there came a letter from Gus Bouscaren asking for subscriptions to the Alumni Fund to which I replied and sent my check.

"The past month, I have been doing a little consulting work for the engineering consultants of the Atlantic Coast Line, and have spent some days in Florida (I still like the North). Have to be in Washington the 19th, and some days thereafter, so could not plan on Boston this time.

To all those who have been bereaved by the death of our classmates mentioned herein, go the individual and collective sympathy of all our surviving class members, now somewhere above 200 in number, slowly but steadily diminishing, as must be expected.

I had finished the foregoing on the afternoon of September 13, and was reading it over and congratulating myself on the morning of September 14, on having finished another set of notes, when I was notified of the death of Mrs. Edward F. Parker, at Reading, Mass., from a very sudden heart attack. She had been suffering from a heart condition for some time, and the end came very suddenly on the afternoon of September 13. So Ed Parker is now added to those to whom sympathy goes deeply at this time of his great loss.

Well, that seems to be all there is for this time. There just isn't any more. I am sorry that so much space is taken up by obituaries, but that is the way it goes at times, and I can only publish what comes in to keep you up-to-date on class affairs. And so good luck to you all until we meet again. — HENRY W. STEVENS, *Secretary*, 1082 Commonwealth Avenue, Boston 15, Mass.

1905

The 51st reunion did not materialize, obviously for lack of interest. When I made the arrangements with the management of the Wianno Club, and subsequently sent out notices to class members, it seemed from requests for a continuance of our yearly reunions, that quite a number of you really meant it. Since I was leaving shortly thereafter for a European trip, I left the rest to Gib Tower, and Gib obviously did his part in spurring registration. However, it appeared that only a few wished to sign on the dotted line, and Gib did the right thing in calling the whole thing off. This experience tells me that only very heavy pressure, plus signatures, will inspire me to try it again before 1960, but undoubtedly some of the local members will gather at one of the favorite Cape Cod spots each June without much publicity.

However, the in-gathering of the Class at Cambridge on Alumni Day was one of the largest ever, and the first one I ever missed. Present were Mr. and Mrs. Babcock, Mr. and Mrs. Cronkhite, Mr. and Mrs. Files, Mr. and Mrs. Fisher, Mr. and Mrs. Shapira, Mr. and Mrs. Nye, Mr. and Mrs. Tower, Harry Charlesworth, Gil Joslin, and Bob McLean. Apparently the new arrangement of having all Alumni Day

events on the Cambridge side of the river was much appreciated. On Alumni Day, Ruth and I were on the high seas on the French Liner *La Liberté*, returning from a visit to our youngest daughter in Weisbaden, Germany, where happily we helped welcome a granddaughter, Kristine Lynn Maynard, a girl after quite a series of boys, total now seven grandchildren. We visited England, Scotland, Holland, Germany, Switzerland, Liechtenstein, Bavaria, Austria and France. On the continent we were fortunate to have, much of the time, the use of an American Chevrolet, with my son-in-law as driver and guide. Thus we were able to see much more of the inside life in many spots off the regular tourist route.

Unfortunately, I slipped in the bathtub on the last day on the boat going over, sustaining a slight concussion, cutting my jaw, breaking a denture, and damaging my kneecap badly. Thus my views of England and Scotland were very vague, although I was able to keep to schedule, losing 20 pounds in the meanwhile. However, after arriving at my daughter's, resting and eating American cooking, I gained weight, made a complete recovery. Will some one who has been there tell me how to get or keep warm in England?

Sam Shapira, after a two-weeks vacation spent at the Belmont Hotel, West Harwich, Mass., tells me '05 did have a 51st reunion. Sam was unable to attend the 50th last year on account of sickness, but was determined to enjoy some of the things we enjoyed so much last year. While there, he invited Ed and Isa Barrier to join him in a 51st reunion and they therefore kept up the '05 record. Sam tried to get Bill and Peg Ball, but they were in New Brunswick waters on their boat "Rabbit Ears." Speaking of grandchildren, Sam brags of having the most grandchildren by one parent, his son Norman, M.I.T.'41, in the Army in Italy, having nine children — the most recent, twin boys born in July this year.

Now it's Andy Fisher's turn. His big news is that his youngest daughter, Edith — you should really know her now — is publishing a book "The Questioning Child and Religion" this fall, a book to help the parent answer the child's questions about religion. I don't expect any commissions on this, but I bought five for my daughters, as they have already had the experience of wishing they knew the answers. This is not Edith's first publication, as she (Mrs. Edith F. Hunter) has already written a couple in the religious field. Andy feels rather chagrined that I have not received any comments on his suggestion that we run a column of humor in our notes. Ask him sometime about his contribution to "Toward More Picturesque Speech," page 53, *July Reader's Digest*.

John Damon, home for a brief respite from his Korean chore, called me up and told me quite a story about his experiences there. He feels that he and his co-workers have done quite well in helping the U.S.A. get as near one hundred cents on the dollar from our contribution of money and things to the Koreans, but "it's a terrific and constant battle." John says that life itself is a constant battle; he is working longer hours than ever before, but feeling fine. Much of his conversation

had a political flavor. He'll have to tell us some time after he gets back (1957, he hopes), as some facts could not be printed.

Herb Bailey (from Ontario, Calif.) called me up in July. He had been to Cape Cod for the Bailey Boys every-five-years reunion. Said he was very well and working steadily, though retired. Casey Turner seems to be satisfactorily retired, as his son Rodman has taken over the business in good shape. Rodman, by the way, "has presented them with their first grandson, after four attempts." Frank and Grace Drake were in Europe about the same time we were there, our paths not meeting as we traveled a similar route from opposite starting points.

Dan Patch '03, sent me a copy of a letter he received from Claude Anderson's daughter, telling of Claude's severe heart attack last May. She predicted her father would recover somewhat, but not to the extent of returning to business life. Not having heard further from her or from our other correspondent, Sid Caine, it seems that her prediction has probably come true. Best wishes, Andy, for a full recovery!

Several times through this medium I have tried to find some one willing to donate his copy of the *Ten Year Book* to the secretary's file, but without success. It would be a great help. I'll swap a 1955 (the latest) M.I.T. Alumni Register, which contains addresses and vital statistics about all M.I.T. former students for a *Ten Year Book*. Also, I have several of the beautiful clear plastic souvenirs of the 50th Reunion, which you may have for the asking as long as they last. This is a clear block $3\frac{1}{4}$ inch x $3\frac{1}{4}$ inch x 1 inch thick with a sand (hour) glass, which may be used as a telephone timer (three minute), egg timer, paper weight, or for many other things.

William C. Marsh, IX, died at Manterio, Ill., on May 28, 1956, after a long illness. Sumner G. Davenport, IV, who had been for many years with the Royal Banks of Canada at Montreal, died on March 7, 1956. Through his son, we learn that Axel Hammarberg, III, died on August 17, 1955, at his home in Stockholm, Sweden. His son told of the fact that all through his years back home after leaving M.I.T., he spoke warmly of his Alma Mater and how glad he was we helped keep him in touch with his former classmates. Maurice B. Landers, II, died at Dallas, Texas, on June 24, 1956. In acknowledging an attempt I made in expressing the cumulative sympathy of the Class, his wife writes of his patient suffering of the last year. Through Norman Lombard I have received copy of a eulogy from a Dallas paper, which I would like to publish, it is so expressive of Maurice's character. However, since the Editor has informed us that copy for the November issue is so voluminous, we should be as brief as possible. Because I was so fond of Maurice, while at M.I.T. and at many reunions, I hope to print it in full in a later issue. H. Hoffman Kennedy, IV, passed away on May 13, 1956, at his home in Florida. — FRED W. GOLDTHWAIT, *Secretary*, 274 Franklin Street, Boston, Mass. GILBERT S. TOWER, *Assistant Secretary*, 35 North Main Street, Cohasset, Mass.

For those who attended some or all of the three events, our 50-year reunion is, we hope, a pleasant memory, and for those who couldn't make it this account may be of interest. The get-together really started Thursday afternoon, June 7, when seven stags and five couples arrived at M.I.T.'s Endicott House for cocktails, dinner, and overnight; among them Sid Carr from Menlo Park, Cal., Cy Young from Minneapolis, Terrell Bartlett from San Antonio, Dick McKay from Dubuque, and Ed Bartlett from Milwaukee. Bill Cady flew on from Portland, Oregon, staying with the Rows before and after, and Guy Ruggles came up from Cananea, Mexico, to complete the list of those from a distance. Jack Norton had planned to come up from Tryon but suffered a heart attack a few months before. We sure missed you, Jack, and hope you are well on the road to recovery. Being honored guests at the graduation exercises of the Class of 1956, fifty men met on Friday morning at the robing room in the Armory, some who hadn't attended any class function for many years. While being attired in cap and gown, it was an occasion for warm greetings for the long-lost brethren. Led by our Class President and Marshal, Harold Coes, we joined the academic procession and slowly moved through the Cage, packed with spectators, including twenty-seven wives, one guest, and Percy Tillson who preferred to sit with his wife and keep an eye on the boys on the stage. Immediately following the Marshal were our esteemed coeds, Mrs. Eleanor Manning O'Connor on the arm of Vice-president Sherm Chase, and Dr. Helen R. Hosmer on the arm of Secretary Kidder. Seated on the platform at the left of the podium (see photo on page 472 of the July Review), the several speakers were given close attention, while watching the presentation of diplomas gave us a chance for conversation. From the Cage we wended our way to Du Pont Court for the luncheon as guests of President and Mrs. Killian. Harold and Mrs. Coes could keep an eye on us from their elevated seats at the head table—see photo at bottom of page 489 of July Review, in which a few of the Class also appear. Harold, in his talk to the graduates and guests, dwelt on the many and significant technological advances during the last fifty years, the shortage of jobs and low salaries in 1906, entering the 1907 depression, as compared with the present graduates, to whom he gave some timely words of advice. Harold's talk was well received, got several laughs, and was warmly applauded.

Then off for the reunion at Snow Inn, arranging details, reservations, and so forth, for which the then-secretary had been in frequent touch with the management—and many thanks, Jim. Soon after arrival, we gathered for the first of the Inn's fine meals in the smaller dining room while the larger 1911 group occupied the main dining room. After dinner, we adjourned to the large lounge in the Captain's House, where Sherm Chase and George Guernsey showed their Kodachromes taken at our 45th—a fine record that revived our memories of that enjoy-

able affair. The weather wasn't perfect, being rather chilly and misty at times, but on Saturday a few golfers were out on a nearby links and a number of more or less ex-golfers tried the excellent putting green below the Inn. As usual at all reunions we gathered in shifting groups to reminisce—the Tech Riot, Convocations in Huntington Hall (Vo ist Blackie?), and chat about personal and professional matters, absent class and course mates, et cetera. The wives likewise had their groups and I'll leave it to you what *they* talked about! More than half of the wives had attended several previous reunions, and all of them seemed to be having one grand time. I'm sure the men did; in fact several have been so appreciative as to write and say so. Plenty of literature was available for perusal and comment—Senior Portfolio, the Class 10-year book that Jack Norton produced, various Alumni Registers, World War I record, class and other photos, Tech Show scores, and Bill Cady brought along a complete collection of programs of our Senior Week doings. Mention should be made here of the little booklet thoughtfully sent to Jim by Bill Furer containing a heart-warming message of greeting and a map and airplane view of Honolulu, to be returned to Bill with all our signatures. Thanks, Bill, and we missed you.

Late Saturday afternoon, the Inn put on a super cocktail party in the Beach House for both classes which gave us a chance to mingle and chat, and likewise enjoy oysters and couteils which kept two experts busy supplying. Then came the banquet, and it was good, and the staff had done an excellent job providing a head table and a place for all of the 71 who were present—44 men and 27 wives. Harold started the post-prandial program with a "few well chosen remarks," then called on the Secretary who thanked everybody who helped to make the reunion so successful, especially those present for attending, reported the state of the class treasury, and asked the Texas Tycoon, Terrell Bartlett, if he had something to say, and did he; several pages of remembering and tall stories that had us in stitches. Next on the program, Sherm Chase proceeded to unwrap a mysterious package and surprised the two secretaries by presenting to each, on behalf of the Class, a large framed certificate—"The Class of 1906 of the Massachusetts Institute of Technology hereby expresses its appreciation and affection to James W. Kidder (Edward B. Rowe) for long and faithful service as its Secretary (Assistant Secretary)." But the expression of appreciation didn't end there, for Sherm then handed to each secretary's wife a sizable check for their help, and at times, "loss of services" perhaps! Totally unexpected and greatly appreciated, and the secretaries and their wives in turn tried to convey their sincere thanks for such a fine expression of approval. Those certificates will be cherished and will serve to stimulate continued effort to foster the interests of the Class in every possible way. Being class agent, Sherm Chase had had the job of raising the fund for the class gift to the Institute and as it hadn't reached the quota he had set, he proceeded to make the very generous offer of matching every

dollar we would pledge then and there, to add the few thousands needed to make the \$40,000 he was after. In nothing flat, with \$500 voted from the class treasury, the goal was reached. Thanks fellers, and especially to Sherm for his fine work and generous stimulant.

The secretary, with Alma's expert assistance, had obtained neat purse size kits which were distributed to the ladies, and for the men, ash trays with the Tech seal, and a new class directory containing the names, courses, and addresses of the 239 living members. Well, next in order was the presentation of prizes, all from the Tech Co-op, and all useful as well as ornamental. The first prize, for coming the longest distance, went to Sid Carr, about a hundred miles farther than Bill Cady. Having been voted permanent possession of the golf trophy at our last reunion, Allyn Taylor couldn't, or didn't, beat the competition this time in the foursome with Cady, Ern Smith, and Guernsey. Bob Ross played nine holes with them, which perhaps spurred George Guernsey on to wind up with the low medal and take the prize. However, to prove that many a match is won by a putt on the last green, Allyn came back to take the prize in the putting contest. Grandchildren being of lively interest to most of us, the assistant secretary ran an auction-like contest to see who had the most. Finally, none could outbid the Farwell's thirteen, and not only did they take the prize for the mostest, but also for the youngest — only a few weeks old. Having a few items left that had been provided for possible prizes at bridge, they were awarded by drawing names and I still maintain that it was strictly legal, but nobody thinks so, as they went to Alma, Marion, and Ned.

But the surprises were still coming, for President Coes had appointed a nominating committee for class officers and asked for their report, which Stew Coey presented, and the following were duly elected for the five year term: President, Kidder; Vice President and Class Agent, Chase; Secretary-Treasurer, Rowe. The Assistant Secretary berth was left for the secretary to fill, and he has a new plan he is mulling over. Thus endeth a long, lively, enjoyable evening and the high-water-mark of our reunion. Sunday was a bit better for weather, and after a late breakfast we assembled for the group picture by a professional photographer (Sidney B. Moody, 547 Main Street, Harwichport, Mass. — send him two bucks if you want a print), and many movies and stills by the class photographers. No swimming and no sailing, a few played shuffleboard, but most of our time was spent in those bull-sessions. After dinner came the good-byes and checking out for most of us, a few planning to stay overnight at the Inn, and others from a distance having accommodations around Boston or staying with friends or relatives. This reunion certainly maintained the record of prior ones, and much credit and thanks are due Mr. Thompson, the front office and staff of the Inn for their share in making it so.

For Alumni Day the Tech meteorologists as usual provided perfect weather, and nearly 60 classmates and wives were present. Some came only for the morning talks and luncheon, a few others only to

the cocktail party and banquet. For a full account of the doings see the July Review, where Harold and Mrs. Coes are in the head table photo on page 490, and a few of the class on page 489. The morning talks were very interesting. We had special tables and were served at lunch, and the cocktail party and banquet were huge and good. After the eats, the President of the 25-year class presented their gift of \$30,000 to be used for an annual freshman scholarship. Then as Class Agent, Sherm Chase gave Dr. Killian a check for \$40,000 as an unrestricted gift from 1906. The gifts distributed to everyone during the banquet were mostly useful, and two of the Class held lucky numbers in the drawings for the valuable special prizes: Alma Kidder and Guy Ruggles. A long, full day, then final farewells. Many of those who attended our 50th were planning, I believe, to see more of New England, or visit friends and relatives before returning home, and I hope everyone felt well repaid for coming. For the record, here is the list of the men and wives who attended some or all of the three events. It has been carefully checked, but may contain errors or omissions, and if you find any, please inform the secretary.

Graduation Only — Dr. and Mrs. Allen Batchelder, Dr. Hosmer, P. J. Kennedy, Jr., Mrs. O'Connor, Rowell, Santry.

Graduation and Alumni Day Only — Couples; Bloom, Breitzke, Brown (H. W.), Lampie, Wick, also Kasson, and Mrs. Spence.

Graduation and Snow Inn Only — Stags; Farley, Kerr, Smith, Williams, Young. Couples; Darling, Dean, Farwell, Newton (Mrs. Newton at graduation only) and Orme.

Alumni Day and Snow Inn — Abbott, the Shermans, and Walshes.

Snow Inn Only — Ball, Blackwell, Couples; Ross and Ware.

Snow Inn Banquet Only — Couples; Barnes, Farley, Kerr, and Frank Benham.

All Events — Stags; E. B. Bartlett, Terrell Bartlett, Beers, Burleigh, Cady, Carr, Gibbons, McKay, Ruggles, Williams. Couples; Bent, Chase, Coes, Coey, Fuller, Guernsey, Hinckley, Hoefer, Kendall, Kidder, Rowe, Shapleigh, Taylor, Tillson.

In preparing these first notes for this issue of the Review your new secretary should perhaps explain that to date (September 8) he is lacking some of the information about classmates, letters received, necessary details for obituaries, etcetera, so is limiting these notes principally to the reunion doings. Several who expected to attend have written that they couldn't be with us for one reason or another, and interesting letters have come from a number who because of health or other causes had to miss it. All these letters are greatly appreciated and will be answered in good time, with more news in the December issue. Meanwhile, why don't you "write to Ned?" — E. B. Rowe, *Secretary*, 11 Cushion Road, Wellesley Hills 82, Mass.

1907

On last May 18, a dinner meeting of some of the men of our Class who live in New England was held at the M.I.T. Faculty Club in Cambridge. Bob Albro, Dick Ashenden, Gene Banfield, Bill Coffin, George Crane, "Bill" Egan, Harry Moody, Bryant Nichols, Bob Rand, Gilbert Small,

and Oscar Starkweather were there to enjoy a delicious dinner, to exchange information regarding other '07 men, and points of view concerning all manner of subjects, ranging from local and personal items of little importance to international events of world-wide significance. After such mental and physical exercise we all listened with undivided attention to a talk by Dr. Zoltan Szaloki, who is assistant director of research at Whitin Machine Works in Whitinsville, Mass., where both Phil Walker and I are employed. Dr. Szaloki received his degree in Mechanical Engineering in 1922 at Technical University of Budapest in Hungary, and the degree of Doctor of Technical Sciences from the same university in 1929. He held high business and professional positions in the field of textiles and textile machinery manufacturing in Hungary and in England before coming to the United States to Whitin Machine Works in 1952. He talked to us last May, however, on "Conditions in Central Europe Before and After the War," a topic with which he is thoroughly familiar through personal firsthand observation and experiences — some of these having involved physical hardship and suffering for himself and his family.

On M.I.T. Alumni Day, last June 11, '07 was represented at all or a part of the events of the day and evening by Bill Coffin, George Crane, Ralph Hudson and his wife, Bryant Nichols and his wife, Don Robbins, Phil Walker and his wife. A telegram of greetings to the Class was received during the evening from Louis Freedman in New York City.

From the evening of September 6 to the afternoon of September 8, I attended a conference of class and regional agents for the M.I.T. Alumni Fund, held on the M.I.T. campus at Cambridge. This was a very interesting, informing, and altogether delightful experience. Several of the officers of administration, including President Killian, gave talks covering various aspects of the opportunities and the problems faced by the Institute and the student body, and there were several profitable discussion group meetings at which many men told of their experiences in increasing gifts for our Alumni Fund in their classes or regional districts, and many suggestions were offered for future procedure.

A letter received last spring from Ernest Altgelt, Consulting Engineer, Route 8, Box 252, San Antonio 1, Texas, painted a rather sad picture of weather conditions there. He said, "San Antonio's artesian water level is the lowest known. Comal Springs, the largest and most constant spring in Texas, discharging normally 250 to 400 cu. sec. ft., has been reduced to 30 cu. sec. ft. The situation has led to the wholesale abandonment of ranches west of here, with the theft of the contents of many houses. Ranchmen are getting employment at San Antonio, Corpus Christi, etc., where there are many new industries. Last year I had a good time, and instructive, too, at the Southwest Conference of M.I.T. at Dallas. There were Yankees telling Texas jokes! I met President Killian and our rotund Executive Vice President of the Alumni Association. . . . Last year I attended the 50-year reunion of the Class of 1905 of Texas University.

lish and wife, Merton Turnbull and wife, and Charles Wallour.

I received a short note from Harold Lockett who has recently retired.

The following is from Hiram Beebe acknowledging the receipt of the *MITTEN*: "My affairs are about the same as the last report except I am a little deeper in various California activities, mostly cultural, the last one being the chairmanship of the Tucker Bird Sanctuary owned by the California Audubon Society of which I was elected Vice President in June. This is about 16 miles southeast of Orange, California, at the head of Modjeska Canyon — good paved road and the Sanctuary is open every day. Madam Modjeska's old home is down Santiago Creek about a half mile from the Sanctuary. We keep a curator there and you will find hundreds of humming birds every day and many other varieties as we feed the birds. Sort of a W.P.A. idea and it sure brings them in. My eighth grandchild, a boy, was born June 3rd at Sioux Falls, So. Dakota. Grandpa is doing as well as can be expected — in fact a little better as this was a boy after three girls in succession in seven years. Our son is Chief Inspector of the Roddis Corporation of Marshfield, Wisconsin, and also has four children."

I am indebted to Dick Bicknell and Dud Clapp for sending me the following from *Chemical and Engineering News* about Ray Jacoby: "When Raymond W. Jacoby graduated from high school in Wilkes-Barre, Pa., back in 1906, his classmates selected this quotation for him: 'Hitch your wagon to a star.' Ray followed that recommendation. His special star has been the American Dye Industry. A leading figure in the U. S. dye industry, Jacoby is this year's president of the American Association of Textile Chemists and Colorists. Now he is carrying out one of the biggest jobs of his career; chairmanship of the Perkin Centennial celebration. Jacoby has long had an intense admiration for Perkin. In discussing Perkin's efforts to synthesize quinine, Jacoby says: 'Here was a man who met failure but knew how to deal with it. He knew that the only real failure comes when you fail to try again. Out of a seemingly unsuccessful project came the discovery of synthetic mauve dye — one of the history's glowing examples of what can be achieved through vision.' The Perkin celebration in the U. S. is actually Ray Jacoby's brainchild. Back in 1952, at a meeting of the A.A.T.C.C. convention committee, he happened to mention that 1956 was the 100th anniversary of the Perkin discovery, an event which the society might well wish to commemorate. ('I didn't keep my big mouth shut,' he quips.) The idea caught on quickly. The A.A.T.C.C. council officially voted to proceed with the plan and also to enlist the cooperation of other technical groups. As might be expected, Jacoby was asked to direct the program. He was a natural for the job, having grown up with the dye and textile industries. After taking an S.B. in chemical engineering at M.I.T. in 1910, his first job was with a textile finishing firm which had just built a small laboratory of its own. It had heard from reliable sources that a bit of research

might do some good, decided to give it a whirl, and promptly assigned Jacoby to run it. 'When I asked them what they wanted me to do as a chemical engineer, all they could say was "We don't know; we never had a guy like you around before."' For more than 25 years Jacoby held positions of important responsibility in a number of textile finishing firms. In 1937 he joined Ciba Co., a leading dye manufacturer, later becoming research director and New England sales manager. Officially retired in 1954, Jacoby is now a consultant with Ciba. . . . Also noteworthy, Jacoby is an astute poker player and an eminently skillful gardener." — HERBERT S. CLEVERDON, *Secretary*, 120 Tremont Street, Boston, Mass.

1911

As chronicled by Jim Duffy in "Thelevener" for August, we had 82 present at our memorable 45th Reunion at the famous Snow Inn in Harwichport on Cape Cod the second weekend in June. We were particularly favored by the presence of 36 wives and President Don's charming mother, Mrs. Harriet Stevens, who accompanied Don and Lois. We also were pleased to have Henry Martin '07, who graduated with us, present throughout. In mid-summer, after receiving a copy of "Thelevener," Don's mother wrote: "The reunion stands out as one of the happiest events in my lifetime." She is 88 years young and shone at the shuffleboard.

Admiral Luis deFlorez, II, was fog-bound in Presque Isle, Maine, at Reunion time, but managed to get down that Monday in time to fly President Don to M.I.T. for Alumni Day, the two landing in the Admiral's amphibian on Charles River Basin.

Attending both the Reunion and Alumni Day were Denison, Dolliver, Bert and Ethel Fryer (who easily won the long-distance distinction, coming as they did from Carnation, Wash.), Jack and Mabel Herlihy, Carl and Helen Richmond, Chet and Mildred Pepper, President Don, O. W. and Gertrude Stewart, Bun Wilson, and Erv Young. Also present for Alumni Day were Bill Coburn, Admiral deFlorez, Cal Eldred, Tom Haines, Roger Loud, and Emmons Whitcomb.

Here are the details on the wedding of our most recent 1911 benedict, who had been married but 6 and one-half weeks when he came to the Reunion at Snow Inn: Erving M. Young, I, was married to Jane E. Gray, at Peddie Memorial Church, Newark, N.J., on Saturday, April 28. A reception was held at Military Park Hotel immediately after the wedding, then the couple drove to The Inn at Buck Hill Falls, Pa., where they spent a week before boarding the Alcoa freighter *Roamer* for a Caribbean cruise. They made three ports of call: San Juan, Mayaguez, and Ponce, in Puerto Rico, returning to Baltimore where they boarded a train for home, 54 Warwick Street, East Orange, N.J. At the reunion, Alcoa president Bun Wilson predicted fine things for them after their wise choice of a honeymoon ship. We all hope you'll have the best of everything, Erv and Jane!

There's another wedding to report, this

one involving a junior Elevever — Dr. Clinton Barnum Seeley, eldest son of Nat and Louise Seeley of Shippan Point, Stamford, Conn., was married to Gail Ruth Robyn on Saturday, September 8, in the Westminster Presbyterian Church, Rochester, N.Y. Our very best to the young Seeleys also, and congratulations to our genial and efficient assistant class secretary, John Herlihy, II, on coming through a gall bladder operation shortly after reunion in fine shape.

Word of the death of four 1911 men has reached me since the last class notes, written in mid-May for the July Review. Albert N. Herman, I, died April 21 at Mount Sinai hospital in New York after four weeks treatment following a heart attack. Born in Bethlehem, Pa., he attended school there and in New York City, where his family moved at the turn of the century. He attended City College of New York before entering M.I.T., and while with us he was an active member of the Civil Engineering Society. He entered the accounting field in New York City, and as a C.P.A. had his own business at 75 Maiden Lane in Manhattan for the last twenty years. He is survived by his wife, Lillian B.; a son, Richard Alan; a daughter, Mrs. Helen M. Herman; four grandchildren; a 92-year-old father, Morris Herman; two sisters and a brother.

Thanks to Leslie B. Ellis '08, assistant class secretary, for many years a resident of Melrose, we learned of the death of a fraternity brother of ours — Paul H. Pearson, II, in Webster, N. H., on May 4. A native of Somerville, Mass., Paul entered the employ of the Boston and Maine Railroad in 1905, being on leave of absence to spend a couple of years with us at Tech. From that time until 1941, he was with the traffic department in Boston, and lived in Melrose. From 1941 until his retirement a year ago he was general agent at the Concord, N.H., Boston and Maine station. He was a past master of Eureka Lodge of Masons, a past president of the Railroad Y.M.C.A., and a former deacon of the South Congregational Church, all of Concord. He collapsed and died on a street in Webster, where he and his wife were living. He leaves his wife, the former Eda Keller, and a daughter, Miss Barbara Pearson of Boston.

Another classmate, who joined us midway through our four-year period, died in Hawley, Pa., on May 10 — Reuben Y. Althouse, I. Born in Marshall, Mo., his family moved to Denver, Colo., where he attended school, and after three years at the University of Colorado he joined us and became an active member of civil engineering. He did his thesis with M. H. Judd, now of Dalton, Ga. After graduation he worked for a while with the Mountain States Telephone Company in Boulder and Denver, but in 1912 went to work for the American Bridge Company in Gary, Ind., shifting to Western Electric Company in Chicago. He enlisted in Naval Aviation early in 1918, and after the war, in late November, 1918, went with Robins Conveying Belt Company at the New York office. Later, Robins combined with Hewitt Rubber Company which is now known as Hewitt-Robins, Inc. He was with the latter firm in their

engineering division for nearly 38 years until his retirement on July 1, 1955, to what he called his "ranch" in Hawley, Pa. His widow wrote me he had hoped to attend our last two reunions, but failing health and his death prevented. He belonged to Union Masonic Lodge No. 7 in Denver and the Gary Chapter No. 139, Royal Arch Masons, in Gary, the Presbyterian Church, and the Professional Engineers of New York. He is survived by his widow, the former Drusilla Wells of Denver, whom he married in 1913.

Captain Ralph T. Hanson, USN, XIII-A, died on July 1 at his summer home in Arden, N.C., of a heart attack. He had lived in Charleston, S.C., since his retirement from the Navy in 1946. A native of Perrysburg, Ohio, he was an honor graduate from the U. S. Naval Academy and joined us to take his master's degree. Ralph was assistant ship superintendent of the New York Navy Yard after graduation, and was commended for launching the battleship *New York* in 1912 and again for preparing vessels for World War I service. After duty at Pearl Harbor, Captain Hanson came to Washington in 1925 with the War Plans Division of the office of the Chief of Naval Operations. Two years later he transferred to the Bureau of Construction and Repair. Between 1929 and 1932 he was assistant naval attaché in London, Paris, Berlin, The Hague, and Rome. In the early 1940s he was assigned to the Cramp Shipbuilding Company in Philadelphia, and then in the Atlanta district as inspector of naval material. He was a member of the American Society of Naval Engineers, the U.S. Naval Institute, and the New York Yacht Club. He is survived by his wife, the former Eleanor Rutledge (who wrote: "Ralph was always proud of being a member of the Class of M.I.T. 1911"), and one sister, in Toledo, Ohio.

In each case, of course, letters were written to the widows of our four former classmates expressing our sympathy.

Now it's a pleasure to report honors received by two of our prominent classmates: Dr. Carl S. Ell, XI, president of Northeastern University, Boston, received his fifth honorary degree on June 3—a Doctor of Laws from Emerson College, Boston; and in late May, Bill Orchard, XI, received the Harry E. Jordan Achievement Award at the 75th Annual Meeting of the American Water Works Association—the highest honor that the association has to give. Bill had been made an honorary member of the association in 1937 and was awarded the John M. Diven Medal for outstanding service to the association in 1953. Congratulations, Carl and Bill, for fine honors, richly deserved.

Ell's citation, addressed to him as "eminent educator, honored administrator, university president," read, in part: "In a very real sense Northeastern University is the lengthened shadow of its present distinguished head. Your creative leadership and selfless devotion have spanned more than two-thirds of its entire history. . . . You have built a great center of learning which has served and will continue to serve thousands of deserving young men and women."

Orchard's award, "for distinguished public service outside the line of duty,"

was given "for his lifetime of devotion to the betterment of his community, his industrial neighbors, and his State—always giving life and leadership to important enterprises in the public interest." Among his services to his community and the people of New Jersey were listed: chairman of a citizens' non-political group seeking the election of qualified officials in Maplewood, N.J., for 25 years; member of the board of directors of the Orange Memorial Hospital for nearly a quarter of a century, and Chairman of the Board for a large part of this term; during World War II, chairman of the War Manpower Commission in the heavily industrialized area of northern New Jersey; and "underlying these records of external activity, AWWA is greatly indebted to Orchard for his wise counsel and deep interest in association affairs as a member of the Board of Directors, as a member of its General Policy Committee since its establishment, and as Chairman of its Finance Committee."

In a letter expressing his delight at Jim Duffy's log of our 45th Reunion and the accompanying pictures, Frank Taylor, VI, wrote from Rochester, N.Y., that two days after reading "Thelevener," he saw Admiral deFlorez on Arthur Godfrey's program, with three of the men who flew down into Grand Canyon to the airliner's wreck. Ina MacPherson here in Framingham also phoned me that morning of August 9 to say she had seen Luis.

My big son, a lieutenant in the Naval Air Reserve, called my attention to the lead article in the July *Naval Aviation News*, featuring a candid shot of the Admiral on its first page at the head of story titled "A Better Way To Do It." Stating that "new tools and devices have improved aviation training by making it faster, cheaper, interesting and effective," the article tells of the creation within the Bureau of Aeronautics in April, 1941, of a Special Devices Desk for the purpose of developing special training aids, with Commander Luis deFlorez, U.S.N.R. chosen to head it. "Upon this gifted engineer and inventor," it continues, "originally rested the responsibility for supervising experiments and developing special training devices for primary flight training, navigation, and gunnery training. A little over two years later, the Desk became a Division and established its base of operations at 610 H Street Northwest in Washington, D.C. There it transformed an automobile display room and garage into a laboratory for the development of training devices. . . . As far back as 1945, Admiral deFlorez initiated a project to study, develop, and evaluate ejection seats for high speed aircraft escape and all the work which has been done since in the development of Navy operation ejection seats has been coordinated."

Developing the remarkable scope reached by these initial special device studies by our illustrious classmate, deFlorez, the article concludes: "Training devices have more than proved their worth and it could be that this is one field in which we have retained significant superiority. Properly exploited, training aids could well be our real secret weapon." We're all extremely proud of you, Luis!

Continuing his avocation of aids for handicapped persons, Ban Hill, I, retired, Baltimore, has recently come up with an improved type book rest for their use, and was given much credit for it in *The Baltimore Sun* in a feature article about his many accomplishments in this worthwhile field.—Congratulations to Ralph Walker, IV, leading New York architect, on his election to the board of directors of the Regional Plan Association of New York City!—Newspaper editor Sam Schmidt, VII, wrote from Cincinnati, where he edits the Jewish paper, *Every Friday*, that he regretted that he was unable to attend the Reunion, because of a trip to Israel.—Emmons and Reta Whitcomb also had a European inspection trip this summer.

"Jim" Duffy, VI, left immediately after the reunion for a business trip behind the Iron Curtain and on a postal from Yalta, during the trip, said: "Am now in Yalta. You will remember F.D.R. was asleep here." He also wrote an interesting letter from Frankfurt am Main, Germany, in which he stated that, on a tour in Vienna in July, he met a party of Boston people to whom he mentioned that he had gone to M.I.T. "On the way out," he wrote, "a very attractive gray-haired woman, who was at the next table, said she heard me mention M.I.T., and that her husband graduated there in 1911. I turned around and there was Maurice Lowenberg, VI, retired Stone and Webster executive from Boston. I had met Mrs. Lowenberg at our 40th reunion, so we had a pleasant reunion of our own. My Russian adventure was wonderful. Was within six feet of Bulganin in the Independence Day celebration in Warsaw on July 22. In spite of it all, I am glad to be on the outside of the Iron Curtain again after over 5,000 miles in the Soviet from Leningrad to Tiflin."

Art Rooney, VI, Youngstown Sheet and Tube executive, came on for his 50th anniversary at Lawrence (Mass.) High School, but unfortunately couldn't tie it in with our Reunion.—As president of the board of trustees, Fred Daniels, VI, again presented the diplomas at Worcester Academy's 122nd Commencement in June.—Commenting on the weird cover on *Time's* May 28 issue, John Scoville, IV, wrote in the June 11 issue letter section: "Sir: When I saw how Henry Koerner had wrecked my favorite player (Robin Roberts, ace Philadelphia Phillies' pitcher), I nearly had convulsions. Please don't do it again."

Our annual "Seven Come '11" class dinner will be held at the Faculty Club, 50 Memorial Drive, Cambridge, on the evening of the 7th day of the 11th month—Wednesday, November 7. If any of you are in Boston or vicinity that day, make it a point to attend this annual class dinner and meet some of your classmates in this area.

Two address changes to close: William C. Davis, Jr., I, 703 Powhatan Avenue, Norfolk 10, Va., and Frank G. Smith, III, Lakes Street, Bethlehem, Conn. A happy Thanksgiving to you all!—ORVILLE B. DENISON, *Secretary*, Chamber of Commerce, Framingham, Mass. JOHN A. HERLIHY, *Assistant Secretary*, 588 Riverside Avenue, Medford 55, Mass.

The following were present at luncheon on Alumni Day: R. C. Stobert from Birmingham; W. L. Collins, President of Hornell Company; L. T. Cummings, retired, of Connorsville, Ind.; Fred Busby of M.I.T.; and your Secretary. At dinner that evening the above were present, with the exception of Busby, and in addition Mr. and Mrs. Cyrus Springall, Charley Jones, and Harvey Benson. We should have a much larger turnout next year, as our 45th reunion will be held at the Snow Inn, Harwichport, just before Alumni Day, and you should start making plans to be there.

I regret to note the death of Thomas C. Fisher, who retired three years ago to Cotuit, Mass. Word has just been received of the death of Angus R. Hammond, III, who passed away at his home in Cambridge, Mass., on April 13.

Your Secretary spent a very pleasant evening with Mr. and Mrs. Carl Rawley last May in Cleveland. Carl is very active, and has under construction at the present time a new dormitory at Kenyon College, Ohio. He is also enlarging a church in Cleveland and building a church in Barnstable, Cape Cod, near his summer home.

A letter from Page Golson tells of his retirement from Ford-Bacon and Davis, where he has been vice-president for many years. He has been elected a director of Western Precipitation Company, manufacturers for removing dust, fly ash, and so forth, from gasses and air. They also manufacture Multiclone dust collectors and Cottrell electric precipitation equipment. Page seems to be in the right business and in the right location, with the air pollution problem as it is in Los Angeles.

Bill Lynch, having retired from the Aluminum Company, was touring Europe this summer with his wife, Mary. Bert Calvin has just moved to 134 Orange Drive, Los Angeles. He is very active as top man in the Simpson Manufacturing Company. One of their recent major jobs is the new Superior Oil Skyscraper in Los Angeles. Henry Babcock, land developer planner, and author of a standard book on property evaluation, is presently occupied with the Bunker Hill development in downtown Los Angeles.

Maurice Cory is living on his yacht in San Diego Harbor. He visited Spain last year. Henry Foley, since retiring from General Motors, is now consulting engineer for the city of Flint, Mich. Charley Carey advises that he has retired from his active job as vice-president and member of the executive committee, but is staying on as Director of Du Pont and several other affiliated companies. — F. J. SHEPARD, JR., *Secretary*, 125 Walnut Street, Watertown 72, Mass.

1913

Greetings to you all, after a forced lapse of several months. We, locally, are very much politically minded. "I Like Ike." Your scribe has been very busy endeavoring to keep the greatest leader in power.

The Interim Reunion of the Class of 1913 was a great success at the New Coonamessett Inn, Falmouth, on the Cape

in June. Those who sojourned for three most enjoyable days were well rewarded by renewing their friendships of Institute days and subsequent reunions. There were nearly 50 classmates, wives, and members of our families present. As scheduled, we spent Friday gathering our forces. Friday evening, we were entertained by Charlie Thompson with his movies of previous reunions, donated by "Butsy" Bryant, and Larry Hart. Also, Charlie Brown, the maestro of square dancing provided his usual inspiring entertainment with the "squeeze box" and recordings, which at that moment were mightily enjoyed by the participants and a host of "lookers-on." But ho, my aching joints. Saturday brought more of our very spirited 1913-ers, with a general "get-together" and reminiscences, highlighted by a most delightful cocktail or coffee hour provided by our big four. A class picture was taken, as shown in the Trend of Affairs section of this issue. This was followed by a very informal class dinner and without the usual speeches.

At our annual class meeting, several resignations were received, including "Pop" Ready's, Fred Murdock's, and "Doc" MacKinnon's. Fred's and Joe's were accepted with many regrets, and appreciation for many years of loyal and painstaking efforts, while Bill's was tabled to 1990. Charlie Thompson was promoted to executive vice-president. Yours truly selected to serve until June 1958 as secretary and treasurer (see further listing at end).

Sunday, the assembled horde kept the Sabbath in their own way as usual. A few departures took place during the day, but the major portion of our reunioners drove over to the Popponesset Inn in the town of Osterville on the Cape, where we all enjoyed the most wonderful clam bake with the essence of sea weed. The balance of the day was taken up with more of Mrs. Harris's food and refreshments. During the evening, several of our classmates and friends wended their separate ways toward their homes, or Boston and vicinity. Monday morning marked the exodus from the New Coonamessett Inn, after three very enjoyable and never-to-be-forgotten days, and another successful 1913 reunion.

Many of our classmates and their charming families joined the other classes at a very novel and outstanding banquet, as well as a cocktail party. The Capen family were unable to attend, but that ever-ready Bill Mattson has furnished us with the following news. Present and participating in the festivities in Cambridge were: Joe MacKinnon, Mr. and Mrs. Coggin, Bill Mattson, Mr. and Mrs. Rollason, Gene MacDonald, Mr. and Mrs. Brewster, Charlie Thompson, Ed Cameron, Pete Haynes, Bill Eichorn, and Arthur Townsend. Of course, we were very much pleased to see everyone who was there at the Cape and at the banquet and we missed all of you who were not present. Many of the old crowd really enjoyed themselves, and we were fortunate to have with us Howie Rand and his lovely wife, Zenas Crocker and charming wife, and our sojourner from Florida, Nat Poor, II.

Considerable further business trans-

pired at this class meeting; Bill Mattson was selected to head the Reunion Committee in 1958 and 1963; Larry Hart was recommended for our Class Agent; Bill Brewster was elected as our Chairman of our Special Gifts Committee for our Fiftieth Reunion. You will hear from Bill shortly. Also, our genial "Vice," Charlie Thompson, after an unanimous vote of all classmates present, appointed a committee to prepare a citation for the work and efforts given freely over the years, to Bill Ready, President; Joe MacKinnon, Treasurer; and Fred Murdock, Secretary. The committee was comprised of Bill Mattson, Ed Cameron, and Lester Gustin. We are very happy to announce that suitable citations were prepared, and a committee consisting of Charlie Thompson, Bill Mattson, and Phil Capen enjoyed a real visit with Bill and Neva Ready, both of whom are now well on the road to recovery. These two dear ones were very grateful to the committees and through your Scribe, send the warmest greetings and appreciations to every member of that great Class of 1913. By the time you read these notes, our other stalwarts will have been presented with their properly inscribed citations. Time is passing very fast, so we shall continue our writings of your doings in December. Remember: No news — no notes. — GEORGE PHILIP CAPEN, *Secretary and Treasurer*, 623 Chapman Street, Canton, Mass.

1914

The first item of these notes in the fall is always the last event of the spring. While the editor can tell all about Alumni Day and Commencement while they are still news, class secretaries must hold their fare until it is reheated in the fall as hash. This year all events were held on the Institute grounds. This is now possible due to the auditorium and the field house. The setting was delightful and the day and evening perfect, with the rhododendrons at the very height of their bloom. How many know that these rhododendrons are the most spectacular in this area and were imported from England as a result of a smart bargain by the Institute's former treasurer, Horace Ford?

As the cocktail party was a part of the evening dinner, our Class did not hold a separate meeting. This made it possible to mingle also with friends in neighboring classes. An even dozen Fourteeners attended Alumni Day, with three accompanied by their wives. Those attending were Affel and wife, Atwood, Crocker, Gazarian, Leigh Hall and wife, Hamilton and wife, Peaslee, A. V. Swift, Tallman, Trufant, Harold Wilkins, and your secretary.

Walt Keith's own company has continued to expand rapidly, so that it has become necessary to build a new plant in Akron. It is a modern structure of a single-story type which was started a year ago and has just been occupied. Perhaps you may have seen his advertising for his "Foot Comfort Cushion" for banks, industry, homes, dentist offices, and, in fact, for wherever persons stand. It is an outgrowth of his rubber dental materials made under the name of The Hygienic Dental Manufacturing Company. Walt's

son, also an M.I.T. graduate, is associated in the business with him.

Professor C. W. Ricker, who has been Head of the Department of Electrical Engineering of Tulane University, retired this summer at the end of the college year. It will be recalled that for several years after graduating, he was on the staff at M.I.T., but for the past 28 years he has been in New Orleans. At the time of his retirement a group of his former students and present staff members gave him a testimonial dinner, at which time he was presented with a television set, a silver tray with julep cups, and a case of the proper material to fill the cups. Ricker is planning to maintain New Orleans as his home and perhaps do some consulting engineering work.

Although a little belated in arriving, word has come from Thorn Dickinson that he retired from Stone and Webster on September 1, three years ago. In connection with construction programs, he has lived in many sections of the country, but for his retirement he is making the Hotel Woodward in New York City his home. Being retired, however, does not restrict him to his home, as he travels far and wide. For example, he spent three months this summer wandering around the Pacific Coast, particularly the Olympic Peninsula.

Your secretary also has been moving around the past summer, with Damascus, Cairo, and Athens being the furthest boundaries of the trip which included three weeks in Northern Italy.

One of the frequent attendants at Alumni Day, as well as at our five-year reunion, has been Chester A. Corney, who died suddenly at his home in Belmont, Mass., on May 26. He prepared for the Institute at the English High School in Boston. At M.I.T. he was a member of the Electrical Engineering and Wireless Societies and sang with the Glee Club. He married Ruth G. King on June 29, 1918, who together with a son Chester, Jr., survives. Corney's sister is the wife of our classmate, Arthur W. Johnson. On his graduation, Corney started with Stone and Webster and remained with them until 1922. He then joined the Boston Edison Company, where he remained until his death. He advanced through the positions of superintendent of engineering, assistant vice-president and vice-president. He played an important part in the electrical designing of the Edgar Station of the Edison Company, which is the largest power station in New England. He was a fellow of the American Institute of Electrical Engineers and also served as president of the Engineering Societies of New England.

Lewis D. Bartlett died on November 14, 1955, in Providence, R.I. He prepared for the Institute at Worcester Academy and started first at Brown University, transferring to the Institute for the last three years. He was a member of Delta Kappa Epsilon and of the Mining Engineering Society. On May 29, 1917, he married Dora B. Swift, who survives him. His whole business career was spent with the Nicholson File Company, where he was a metallurgist and later engineer in charge of the mill. He had developed unique furnace designs and solved many

special heat-treating problems. — H. B. RICHMOND, *Secretary*, 275 Massachusetts Avenue, Cambridge 39, Mass. H. A. AFFEL, *Assistant Secretary*, 120 Woodland Avenue, Summit, N.J.

1915

What a class! For Alumni Day, on June 11, the following classmates and their ladies, with Barbara and Virginia Thomas, attended the luncheon, class cocktail party and Alumni Dinner later: Lawrence H. Bailey, Mr. and Mrs. Leland V. Clark, Everett S. Coldwell, Mr. and Mrs. Henry F. Daley, Marshall B. Dalton, Vikin Enebuske, Bernard L. Landers, Mr. and Mrs. Henry L. Leeb, Mr. and Mrs. Azel W. Mack, Archibald S. Morrison, Mr. and Mrs. P. Judson Munn, Mr. and Mrs. Charles G. Norton, Waldo F. Pike, Mr. and Mrs. George T. Rooney, Mr. and Mrs. Henry C. Sheils, Carl W. Wood, Max I. Woythaler, O. Ricker Freeman, Mr. and Mrs. Evers Burtner. It was a wonderful showing, and a fine chance to renew old friendly acquaintances. Our class cocktail party at the Algonquin Club, under the able direction of Barbara Thomas and Al Sampson, was its usual outstanding success. We all thoroughly enjoyed it.

We had a meeting of class officers, with assistance from Wally Pike and George Rooney on plans for our 50th Reunion. We had invited a number of classmates to attend, with the hope that they would become committee men, and the following also expressed their regrets and gave class news. Ben Neal graciously and generously has offered to be chairman and is working closely with Jack Dalton to get this committee organized. He is meeting us in Boston in the fall, to get started. Ben is a swell chap for this outstanding job, and we are all confident that he will put this over successfully.

From Herb Anderson: "I have been so much on the move this year to date, that up to the present time I have not been able to plan attendance in Cambridge on Alumni Day. I remember very clearly the pleasant cocktail hour that we spent together at your apartment last year and I certainly would like very much to indicate at this time that I would be with you and the classmates you have indicated. If I can possibly see my way to fly up to Boston for the day, I shall certainly be very happy to be with you but for the present I can't with certainty tell you that I will be there." From Sam Berk: "Here is the note and I am sorry I have to say no. We are having our annual meeting in New York, June 11-12-13, and I must attend. Hope to spend most of the summer here on the farm, with a few short trips to several conventions and meetings. Hope also to see you in Boston in the Fall." Carl Dunn writes: "If it were not so far and if we as a company were not so overloaded with work which takes direction from some of us old work horses, I would be very intrigued to hear your plans. I don't see how I can make it, Azel, but if I can help from this distance, count me in." From Hank Marion: "Thanks for your letter of the 15th, and I wish it were possible for me to say definitely that I would be able to be in

Boston for Alumni Day, on June 11th, and could therefore attend the get-together that you are having at your apartment that afternoon. I am hoping that I will be able to get up to Boston around that time; however, I have several things on the fire and I am not sure whether I will be able to do it or not. I want you to know how much I appreciated the remembrance card which the boys who attended the last class dinner in Boston signed and you sent on to me. I would have loved to have been there, but it just did not work out that way, and it was a thrill to get the card and realize that you were all thinking of me even though I could not be present. I am glad to report that I am feeling fine these days, and I trust the episode at the hospital is all over and I won't have to be thinking of that again. With kindest regards to you and Frances."

Even though Ben Neal couldn't get to Jack Dalton's preliminary committee meeting, he was in Boston shortly before that, as you will see from his letter. Fran and I had a nice visit with him, at which time he agreed to take this chairmanship. Good old Ben! "Boy, would I love to come to your apartment on the afternoon of Alumni Day! However, I have run into a conflict, which I see no way of resolving. The week of June 11th is the biennial Plastics Exposition in New York City, and I am already committed for several engagements there during the week, which I can't pass up. However, I will be in Boston next Tuesday, the 29th, and will try to give you a ring to at least say hello. If you would have time to have a drink with me in the late afternoon, I would love it!"

Those of us at Jack Dalton's meeting that afternoon in our apartment were enthusiastic about his plans for our 50th Reunion and capital gifts fund, and as I said, we feel sure when you hear from Ben Neal and his Committee on this, you will realize that we have picked the right man for this job and that he and his gang will do an outstanding job. One of our regular Alumni Day attendants, Parry Keller, could not attend, but like Ben Neal, was in town just before Alumni Day. Fran and I spent a delightful evening with him, as we always do. Parry writes his usual interesting letter. "I have been back on the job for a week, and it has been a very hot week here. I feel like starting on a vacation again to recover from the shock of the very sudden advent of summer. My first day back at work was June 11. I kept thinking about M.I.T. Alumni Day and the 1915 cocktail party at the Algonquin Club in the afternoon. There should be a law. I certainly did not want to miss the fine M.I.T. program, including the '15 gang in Boston. I want to thank you, Azel and Fran, for the very enjoyable evening I spent with you. I enjoyed every minute of it — the fine hospitality and sociability in your wonderful apartment and the delicious dinner at the Faculty Club. Please tell the Club Manager that I think that he is doing a fine job. Furthermore, tell him not to be so bashful in promoting business for that fine wine list. I certainly did appreciate the thoughtful extras which you provided for me. You made me feel very much at

home. I must close now. I promise to do the best I can to provide you with material for the Tech Review. Hope to see you again soon."

Some nice summer contacts kept us in touch with old classmates. This letter from Herb Swift: "Thanks for the pictures. They are good ones and do show up that crazy hat of mine. Funny I didn't get any one to use my camera to take a couple of me. Guess I was too modest at the time! Sorry to miss the Class Party, etc., this year, but was all tied up in Concord, revising the Constitution of the State of New Hampshire. Every eight years, we take a whack at it. I was a member in 1948, and again this year, of the 'Constitutional Convention.' We shortened it to 'Con-Con' which is not to be mistaken for Can-Can! Glad to hear you and Fran will be up this way this summer." While visiting in the Lake Sunapee region, Fran and I had dinner with Swiftie and spent an evening at his estate, Windy Acres in New London, N.H. Herb is the same old chap and seems to keep going at his usual rate.

Saul Schneider from Haverston, Philadelphia, was visiting in Boston and spent some time with us. He is enjoying his retirement and advises us all to do it soon. This summer, Barbara Thomas completed 25 years at M.I.T. For some time she has been senior secretary in the Physics Department and has seen a good many students come and go. Congratulations to Barbara, and all the best to her for continued happiness and success in her position, until her retirement. Barbara is a real "class mother" and looks out for all friends and sons of 1915 at M.I.T. William E. Brown, Dean Emeritus of the University of Vermont, Burlington, Vt., was recently appointed by the Alumni Association to the position of Alumni member on the M.I.T. Corporation Visiting Committee. Congratulations to our own Dr. Bill Brown! Allen Abrams has recently retired from Vice-presidency of Marathon Corporation, Rothschild, Wis., and opened his own office in Wausau, Wis., as an advisor on industrial research and technical surveys. Congratulations to Allen and all the best to him for success in his new work and happiness in his retirement. Donald Fowle of Woburn, Mass., has recently joined the Urban Redevelopment Staff of the Lawrence (Mass.) Housing Authority. Don had previously been chief architect for the Federal Housing Administration and chief project planner and engineer for the Public Housing Administration in Boston. Congratulations and success to Donald! While in New York, I had a long phone talk with Ken Johnson, chief engineer, Textile Machinery Division of McKiernan-Terry Corporation, Dover, N. J. I think there are some other M.I.T. men associated with him. Ken was laid up earlier in the summer with pneumonia but is now back on the job and taking it a little easier. We are all a little older, Ken, than in those old Back Bay days, so take good care of yourself.

Our nomadic 1915 men continue to travel. One of our regular reunion attendants, Bur Swain, missed our class cocktail party on Alumni Day, but sent this delightful card from somewhere in Norway.

"Boys and Girls, Greetings. Have fun. I'll have a beer and so will my girl, for that's all there is. We are moving up the Coast, having left Bergen last night. Nothing level here, either railroad or bus, but the roads are good though narrow. One of two passing cars stops while the other fends around it. Lots of food and beer, but a good cocktail like you are enjoying just makes me weep that I am not with you. Happy times. Saw lots of snow. All at Sea." Knowing Bur all these years, I know what he means by that finale "All at Sea," but you were thoughtful, Bur, to remember us, and both Al Sampson and I were glad to have your card. Clive Lacy and his family spent the summer in the Swiss Alps and wrote us from Weggis, Switzerland.

On November 2 at the M.I.T. Faculty Club, we are having our annual fall class dinner, which should be the usual gay party, with record attendance. We expect Ben Neal to come for this, so in next month's column you should get some of the details of our 50th Reunion plans. These are all the class notes I have collected over the summer, so you can't blame me for renewing my old plea of "help Azel." — AZEL W. MACK, *Secretary*, 100 Memorial Drive, Cambridge 42, Mass.

1916

Well there you are — it's come and gone — that 40th Reunion! 'Twas a grand reunion, so said all of the 75 who attended. Included in the 75 were quite a few who had never missed a reunion and four who had never attended one before. Officially, it started off Friday afternoon, June 8, at the Oyster Harbors Club in Osterville (Cape Cod), continued on at the Club until Sunday evening, and then picked up again with a cocktail party in Cambridge on Alumni Day, Monday, the 11th. We are all particularly indebted to the management of the Oyster Harbors Club for the excellent food, atmosphere, and facilities (including a top-flight golf course), provided throughout the weekend. We had the place all to ourselves for the whole time, and practically everybody behaved practically irreproachably practically all of the time. Here is the list of those who attended: Steve Whitney, John Woods, Ralph Fletcher, Dan Comiskey, Dick Rowlett, Dina Coleman, Don Webster, Al Lovenberg, Gilbert Gaus, Bob Crosby, Jim Evans, Paul Hatch, Cy Guething, Harold Gray, Bill Barrett, Hy Ullian, Theron Curtis, Harvey Stocking, Hovey Freeman, Steve Brophy, Emory Kemp, Hank Smith, Steve Berke, Allen Giles, John Gore, Izzy Richmond, Lew Pratt, Jack Burbank, Barney Gordon, George Petit, Dave Patten, Leonard Best, Paul Duff, Harold Dodge, Howard Hands, Herb Mendelson, Jap Carr, Joe Minevitch, Francis Stern, Joe Barker, Charlie Lawrence, Jack Freeman, Fred Bryant, Paul Pizzorno, Hal Neilson, Doug Robertson, Howard Claussen, Venaldo Harshbarger, Leonard Stone, Walt Binger, Arvin Page, Duke Wellington, Bill Leach, Bob Wilson, Art Caldwell, Eric Schabacker, Henry Shepard, Charles Woolley, Earl Mellen, Ralph Mills, Nat Warshaw, Earl Townsend, Harold Whiting, Karl Engstrom, Bridgie Webber, Ken Sully, Phil Baker,

Willard Brown, Bob Burnap, Harold Russell, John Fairfield, Howard Green, Charlie Reed.

Do you remember when, as freshmen, we had the persistent news flash that some guy in the Class had a baby? The Class of 1916 had a Class Baby! And do you remember how we all gawked at the reported father, Emory Kemp, and marveled or something? Well, the Class Baby, Malcolm Kemp, was with us at our 40th as one of the significant events of the Reunion, and his age was no secret to anyone. Welcome indeed, and see you again, Malc, on our 45th! And also we must report another attendant, our honorary class member, Bob O'Brien, the sparkling secretary of Ralph Fletcher, who has been such an active part of several of our past reunions — with the same fire, the same enthusiasm, and the same penchant for hard work. 'Twould hardly seem to be a reunion without you now, Bob!

The weather for the Reunion wasn't the best (the first time in "n" years, where "n" is a large number, that it has not been a sunshiny weekend). However, the Oyster Harbors Club offered us varied interests and comforts and once again proved to be the ideal spot for a reunion. Jim Evans had the record for the longest period at the Reunion, arriving on Wednesday and leaving on Monday. Ken Sully came from the furthest point — all the way from California. Shuffleboard and golf attracted a large number, some drove around to parts of the Cape, others did a little sailing, and a few of the more youthful and daring in the group concentrated on tennis. Next to "elbow-bending" and good conversation, bridge was a main center of interest on the indoor activities. Some of these activities are discussed in the letters which are recorded later in this column. With respect to tennis, Jap Carr and Herb Mendelson teamed up to take on Izzy Richmond and Bob O'Brien. Five years ago this same match took place and Jap and Herb were the winners. This time they started to repeat their victory, winning four of the first five games to establish a substantial lead. However, Izzy Richmond (bum leg and all) proceeded to make a number of outstanding shots which, when coupled with the steady play of his partner, brought his team out on top in the first set. In the second set, Jap and Herb again jumped off to an early lead, but again Izzy Richmond came up with some key shots and exceptionally good court coverage to bring victory to his team. Later in the day, Jap, his two sons, and Bob O'Brien played two sets, and it was a thrill to see how well the Carrs handled themselves on the court. Jap and his family can no doubt look back on many good times on the tennis court and also can now look ahead to many more. It certainly has been and will continue to be a wonderful family activity for them.

After the Saturday night dinner, a class meeting was held in the ballroom of the Club. At the outset a note of sadness was introduced by the thought that our President, Bill Farthing, who was with us on the 35th Reunion, was no longer among us. Ralph Fletcher, as Secretary of the Class, agreed to serve as temporary chair-

man of the meeting. Following brief words of welcome and general commentaries by Ralph and others, the meeting was thrown open for business. The first item to come up was the need for an election to fill the vacancy in the office of president and to make any changes or additions which would give the Class proper representation. The following men were approved to serve on a Nominating Committee: Jap Carr, Gil Gaus, Cy Guething, Bridgie Webber, and Steve Whitney. This committee withdrew, and in due time returned and presented the following nominations: President—Ralph A. Fletcher; Vice-president—Joseph W. Barker; Secretary—Harold F. Dodge; Treasurer—Hovey T. Freeman; Executive Committee—above officers plus Bill Barrett, Steve Brophy, Jimmy Evans, Izzy Richmond, Steve Whitney, and Bob Wilson. Following a brief discussion, and upon motion made and seconded, it was unanimously voted to elect the officers and executive committee as nominated. Treasurer Hovey T. Freeman reported briefly on the financial status of the Class. Class Agent Bill Barrett spoke on the standing of the Class in donations to the Alumni Fund and pointed out the need for building up our 50th Anniversary gift to the Institute. He noted that Chuck Loomis had done some excellent work in pushing this along. Bob Wilson spoke further on the subject of the 50-year gift, emphasizing the need for serious consideration now to set up a plan which would assure a substantial gift when the time arrives for the presentation. Steve Brophy also spoke briefly to the group on the importance of planning now for the 50-year gift, one appropriate for a Class of our standing. The balance of the meeting was devoted to general good fun, highlights of which were Dina Coleman's very popular "Pierre" story, and Bob Wilson's highly repeatable one about things that don't tear where they should.

Of those who helped significantly to make the Reunion a success, special mention should be made of Ralph Fletcher, General Chairman; Steve Brophy, Publicity Chairman; Bill Barrett, Finance Chairman; and Jim Evans, Assistant General Chairman. Then, too, appreciation goes out to Bob Wilson, Len Best, John Gore, Jack Burbank, and Joe Barker for the "loot" that they brought to the Reunion for general distribution. The items included household oil, pencils, gum, calendars, life-saving instruction cards, and ballpoint pens. We are indebted also to those who rummaged through their attics to bring along old pictures, mementos, and so forth, of prior class activities. These included a picture taken in 1916 and one for each reunion since then, with the exception of the 1921 outing. Also in line for some real thank yous (including mine; signed, Sec.) is Harold Russell, who did his usual splendid job in handling transportation arrangements from Boston to the Cape and back again.

As a final item in the summary of the 40th Reunion activities, we would like to list here the guests who attended our cocktail party in Boston on Alumni Day: Mrs. Jap Carr and son, Jeffrey Carr; Mrs. Arvin Page; Mr. Sidney Hall '43; Mrs. Al Lovenberg and daughter, Helen; Mrs.

Ralph Fletcher; Mr. and Mrs. John Lyle, and Mr. and Mrs. Leigh Hall '14; Mrs. Dan Comiskey; Mrs. Bridgie Webber; Mrs. Paul Duff, Dr. and Mrs. John Duff, Paul and Mary Duff, Brian and Florence Duff, Betty Duff, Mrs. Ellen Duff Pickering, Shiela, Brendan, and Gerry Duff (What a wonderful family!); Loretta Torrey, Mrs. Murray Horwood; Mrs. Joseph Barker; Michael Mallon; Mrs. Hy Ullian and son, Joseph Ullian. It was a wonderful party and, of course, the highlight was having Dr. Duff bring his wonderful family to our party.

Your secretary has had a lot of help in collecting bits of information to include in the report of the Reunion. Jim Evans, for example, and a good example at that, has written in, saying that as one reflects on the general "goings on," there are several things truly worth recording. He notes Phil Baker's thoroughness in things he does and suggests that Phil be asked to write up a "blow-by-blow" description of the very meticulous way in which he set up a picture record of the Cy Guething-Phil Baker trip to the Reunion from their homes in Detroit to Boston and the Cape, and the return—"What? No film?" Jim then taps his memory with a whole series of items somewhat as follows: Bob Crosby's red hat and pipe . . . Jeff Robertson's genial good nature and sartorial perfection . . . Steve Whitney's telegram phoned to the University Club in Boston for transmittal to Chuck Loomis; Rowlett, Coleman and Evans had sore sides for two days from the laughter; what was the matter with the person taking the telegram on the other end for 45 minutes? . . . Bob Wilson's continuing ability to play top golf with Arvin Page and to tell good stories . . . Joe Barker and Bill Barrett's "snoreless" apartment . . . Pizzorno's enthusiasm for this his first reunion; the same goes for Harry Smith, Len Best, and Harold Mills (Jim adds: "Get back, you rascals.") . . . Dutch Gaus trying to out-snore Bob Burnap (I won over Howard Hands—signed, Sec.) . . . Hovey Freeman trying to get rid of his Treasurer's job . . . Steve Whitney's hospitality on Monday at his Watertown home . . . Izzy Richmond's sports outfit . . . grand layout at Oyster Harbors that afforded us such comfortable accommodations, a grand cuisine, good surroundings and a fine golf course and tennis courts . . . Harold Dodge and Peb Stone's Reunion golf matches . . . Joe Minevitch's enthusiasm over his new business venture . . . the boys who weren't there and should have been . . . Cy Guething's missing his plane connection out of Hyannis; this episode really crowns him as our Class's "Most Happy Fella" . . . Dina Coleman and Stew Rowlett's ability to "take it easy." A good collection of recollections, Jim, and much appreciated. Additional items in like vein are: Arvin Page, George Petit, and Jim Evans trying to discuss carload merchandising of such electrical gadgets as irons and toasters with the Dean, one Francis E. Stern of Hartford, Los Angeles, and some fishing club in Pennsylvania . . . Hal Neilson's real and vivid inside story of the human problems in the management of a cotton plantation down in Mississippi; if you

didn't hear the story, ask for it at the 45th.

We certainly are pleased with the number of letters that have been sent to us and to our new President with comments on the Reunion. Several of the letters to Ralph we are including right here, but the rest will probably have to wait over for a subsequent report because of space limitations. Bob Crosby wrote Ralph: "Let me compliment you on your masterful handling of all arrangements for the Reunion. It was certainly a great success, and, I'm sure, due primarily to your untiring efforts. I certainly enjoyed every minute of it and with all the diversions available it would be hard to pick out any particular highlight. What with golf, tennis, shuffleboard, bridge, and just sitting, to say nothing of elbow-bending, it would be hard to see how any of the fellows could have had anything but a superb time, which I'm sure they did." And from Bill Barrett: "Thanks for the picture of the Reunion and the note enclosed with it. Your super-service is most appreciated. Looking over the figures of the number present, I did not realize that we were within two of the number attending the 30th Reunion. This is a fine record and you are to be congratulated on getting such an excellent representation." And in an earlier letter to Ralph from Bill: "The 40th was the best ever! From every standpoint it was a grand affair. You did exceedingly well to get such a large group together and judging from the comments I heard, they all seemed to enjoy themselves." Phil Baker wrote: "I am enclosing several snapshots taken during the Reunion. I thought they might be of some interest to you. They are not perfect examples of modern photography, nor are the subjects, but they will serve as a slight reminder of a very great weekend." And this from Barney Gordon: "Our 40th Reunion was a most successful and pleasurable one. The committee is to be congratulated on the fine job it did in making our comfort and enjoyment so complete. I shall long remember this weekend and with the happiest of associations."

Willard Brown pleased us with this one: "Thoroughly enjoyed the Reunion . . . and the opportunities of again rubbing elbows with so many old friends. In spite of the cold weather so likely at the Cape in early June, the high spot for me was a one-day sail with Walt Binger, Howard Green, and I took in a little sloop rented from Chester Crosby's boat yard. Sailing is a warm weather sport . . . Brr! We were glad to put in at Oyster Harbors Club for a hot lunch, not to mention the warming preliminaries. Even though, to be sure of not running aground, we had to tie up at someone's private dock! Oyster Harbors Club is 'tops' for an affair like ours. Hope we can have our 45th there. I liked very much the idea of the advance underwriting which saved so much fuss and bother of small extra charges during the Reunion. If the 'backsliders' (and there are some right here) knew what they were missing, they would sure be on hand next time. And, 'it's later than you think!'" And this one to Ralph from Lew Pratt: "Mine is probably the easiest reply that anyone will make to your letter concerning the 40th. Perhaps the most pleasing

event to me was your election [as President]. As for the place, I can only say that our class, in growing numbers, is confirming my judgment and of course that of Emory Kemp, in choosing the Cape for a place to live. The Oyster Harbors Club is but an enlarged reproduction of what has been my summer home for 35 years and my residence for the past ten. The store here is also a reproduction of exactly the same type. Since it was formerly a night club, I am sure that other members of the class, too, would feel at home in it. The view from my office window here is much the same as the one the class was looking at when the picture was being taken, except that I am now overlooking Falmouth Inner Harbor instead of Cotuit Bay. I am glad to note that Theron Curtis, Jack Burbank, Hy Ullian, to mention a few, are now Cape Codders. I can't think of anything more enjoyable, worthwhile, or more convenient for the rest of the class to do than to hurry up and do likewise. Then we will, in due time, be celebrating our 100th Reunion down here somewhere — with good attendance and you as President."

And another on the Reunion, this one from Cy Guething: "My delay in answering was entirely due to the Reunion, as I was forced to take a rest and only returned August 3rd. I assume it was George Petit who suggested that the strenuous sport of baseball or softball be discontinued at these Reunions because of our advanced years. You may let it be known that it is my suggestion that shuffleboard also be eliminated from the curriculum and substitute in its place 'bridge and sniftn' or some similar relaxing sport. This suggestion is made only after much consideration and warnings from the same doctor who prescribed that I take a month's rest, as much off my feet as possible, to alleviate the pains and swelling resulting from those games at Oster-ville without sufficient training. Am always in 'condition' for 'bridge and sniftn' as are all the boys — in part." Jack Burbank wrote: "There is very little I can say about the 40th Reunion that is not already known. As you may know, I have just completed a cottage in Marstons Mills on Route 149 which was just 10 minutes by automobile from Oyster Harbors Club. On Sunday before noon, Mrs. Burbank and I were favored with a visit from classmates Brophy, Ullian, and Pratt. Charlie Lawrence dropped by on Saturday. The house I have built is constructed for year-round occupancy so that when, as, and if retirement time arrives and Mrs. Burbank can be sold on the idea, I will then make this house my headquarters. Of course, I played golf with Ralph and Joe Barker and Jimmy Evans. The game was not outstanding by reason of good scores — rather by reason of good fellowship. Francis Stern and Joe Barker were caddies the first day. I might say that classmates driving to the Cape in the future will always be welcome for a cooling refreshment if they stop off at the Burbank place on Route 149 which is on the west side of the road three miles from Route 46 and one mile from Route 28."

In addition, notes have also been received from George Petit, Allen Giles, Paul Hatch, Ken Sully, Steve Whitney,

Jim Evans, and Hovey Freeman expressing their gratitude to the Reunion Committee for a very excellent job in the arranging of details and handling of the Reunion at the Oyster Harbors Club.

As someone, Bill Barrett, I think, has said, it was good indeed to have the opportunity at the Reunion to visit with Steve Brophy; he is so much on the go in New York and on *American Heritage* activities, but how helpful he has always been in all the Class activities. We asked Steve if he could drop us a line of comments on the Reunion, which he has done, saying in part: "It was fine visiting with our old classmates. I was especially happy to note that many had changed very little in five years. It was particularly good to see some who hadn't attended recent reunions and, of course, we missed some old and dear friends, notably, Chuck Loomis. I have had a couple of letters from Chuck since the Reunion and he certainly appreciated the telegram and round-robin letter. Incidentally, his last letter was quite optimistic concerning his health." In a letter to Ralph, too, Chuck expressed appreciation for the messages, saying, "Needless to say, I had been thinking of all of you at the Reunion and wishing I could have been there." It was the first of the 5-year reunions that he had missed. We're all pulling for your speedy recovery and return to good health, Chuck, and know you won't miss the next one.

In other correspondence we have learned that Francis Stern and his wife are in Europe on an extended trip, hoping to return to this country in the middle of December, and that Izzy Richmond's daughter was recently married.

In August we received word that Joe Barker had been nominated by the Alumni Association for the position of Alumni Member on the M.I.T. Corporation Visiting Committee, Department of Modern Languages. As a matter of general information, the Corporation's visiting committees are composed of nine members: three members of the M.I.T. Corporation, three non-M.I.T. members chosen by the President, and three M.I.T. alumni members recommended by the Alumni Association with the endorsement of the head of the department. Ordinarily the committees meet once a year on a date convenient to the members, frequently at the end of the calendar year or early in June. The purpose of the committee is to give the department the benefit of advice and opinions of an interested group other than those actually connected with the M.I.T. faculty or administration.

The following changes in address have been noted: Chuck Loomis, 35 Godwin Lane, St. Louis 17, Mo.; Wesley H. Blank, R.D. #3, Box 212, Charlottesville, Va.; John B. Ingle, Box 145, Carlsbad, Calif.; and Joel Connolly, M.S.M.C., A.P.O. 63, c/o Postmaster, San Francisco, Calif.

Well, now, that concludes the first chunk of work that your Secretary has had to perform as such since he was given the job in June. Ralph Fletcher and Bob O'Brien have been most helpful in this period. Please remember that the only way we can keep this column full is to have something to fill it with. We'll look forward to recording in the next is-

sue more of the reminiscences of the Reunion that we have received from Bill Barrett and others. Drop us a line as you see, hear, or do things, significant or not. — HAROLD F. DODGE, *Secretary*, Bell Telephone Laboratories, Inc., 463 West Street, New York 14, N. Y.

1917

Among those representing the Class of 1917 on Alumni Day last June were Walt Beadle, Rudy Beaver, Ray Blanchard, Penn Brooks, Bill Dennen, Art Dickson, Stan Dunning, Jim Flaherty, Heinie Gartner, Lobby, Al Lunn, Win McNeill, Dix Proctor, Ray Stevens, Tubby Strout, Ed Tuttle, and Bill Hunter. We are all sorry to have Tubby Strout transferred by his company to their San Francisco headquarters (California Packing Company, 215 Fremont Street). Tubby has been New England manager for the last 16 years and was reluctant over the move, too. He has served the Class loyally, being a past president, a member of the Alumni Council, a staunch supporter of any Class or Tech activity, and always ready with a helping hand. We miss him and wish him well.

C. Baldwin Sawyer has been renominated by the Alumni Association for the position of Alumni Member on the M.I.T. Corporation Visiting Committee for the Department of Metallurgy. Stan Chisholm, materials engineer at the Naval Air Station at North Island, San Diego, Calif., stopped in to see your Secretary during a visit to the East last spring. Stan has promised to be back for the 40th Reunion in '57.

Henry F. Goldsmith and his wife vacationed recently in Spain. Ken Bell, another traveller, sent the following word from Lebanon: "We had the great thrill and privilege to go to Petra three weeks ago, and while a very strenuous trip, one I would not have missed for the world. The season is very short — two months in spring and fall. At other times the rocks are burning hot, or the gorge is in flood."

A group of New York '17ers met at the M.I.T. Club of New York (Hotel Chatham) on Monday, May 14, for cocktails and dinner. Those present (Justin Basch, Ray Brooks, Joe Littlefield, Dick Loengard, Win McNeill, A. R. Morton, Bill Neuberger, and Dix Proctor) were glad to welcome Bob Erb to the New York group. Bob, as you may have read, has been recently made President of the Melville Shoe Company of New York. During the evening Joe Littlefield gave an account of his recently acquired daughter (of interest to the grandfathers present), and everyone gave Dick Loengard a lot of advice on how to get the most money from 1917 men for their 50-year gift to the Institute. The Club Steward reported an average of three plus drinks per person, which gives some indication of the sociability. Everyone decided that 1917 commuters should be in bed early so the party broke up before 10:00 P.M. Now that the New York Club's new quarters and bar are functioning, these get-togethers can be more frequent. When you are in New York, stop in at the Club. There are always 20-30 M.I.T. men in for lunch.

Justin Basch was recently elected Vice-

president of Oakite Products, Inc. He will continue to supervise research in new chemicals and formulae for company products.

Harry Wansker was general chairman of the convention meetings of the Armed Forces Chemical Association held in Boston on June 14 and 15. In a display of boundless energy, Harry was principally responsible for the success of the 11th Annual Meeting. An attendance of 750 were treated to such highlights as a spectacular all-day U.S. Naval exercise at sea; distinguished speakers from industry and the military discussing topics of current scientific interest; accompaniment of the Naval Aviation Cadet Choir from Pensacola at the Association banquet; and a principal address by Clifford C. Furnas, Assistant Secretary, Department of Defense (R and D), before a distinguished head table and members and guests. Your secretary attended the meeting and heard comments on all sides that this was the best national meeting the Association had ever held.

We were pleased to learn that Barney Dodge was recently awarded an honorary Doctor of Science degree by Worcester Polytechnic Institute.

Our 40th Reunion comes next June. It will be held at Wentworth-by-the-Sea at Portsmouth, N. H., where we have been so well taken care of for our last two reunions. It is an ideal location. So mark the dates, June 7-8-9, 1957 — and make your plans to be there. For you who do not know Wentworth, it is a fine hotel on the ocean, with boating, fishing, golf, and so forth. At various gatherings of the classmates there has been discussion of places, should we want to make a change, but Wentworth wins by a large margin. The question of inviting wives has also been discussed with a vast majority wanting a non-wife reunion. You will be receiving more and full information, but this is the time to make your plans to be there.

We are discontinuing for the time being the birthday reminders that have so successfully brought forth details of your doings for the class notes. Your cooperation has been most helpful, and it is hoped that from time to time you will get in touch with either Win McNeill or Ray Stevens to bring your activities up to date. — RAYMOND STEVENS, *Secretary*, 30 Memorial Drive, Cambridge, Mass. W. I. MCNEILL, *Assistant Secretary*, 270 Park Avenue, New York, N. Y.

1918

Enthroned in a real log cabin on the quiet shore of Thorndike Pond, where one can breathe the air of sublimity far from the encircling rush of city traffic, it is a warm August evening as the attempt is made to give unity and coherence to the diverse items in the "Class Notes" folder. Attending to a tribal rite, the first item of business is to report, courtesy of the ever faithful Gretchen and the equally helpful Alumni Office, those who foregathered on Alumni Day to taste a big mouthful of old memories: Sam Chamberlain and wife, Bill Wills and wife, Nat Krass, the Corporation XV twins — Paul and Allan Howard, Lester Connors and wife, Harold Weber and wife, Max Selt-

zer and wife, Ed Grossman and wife, Johnny Kilduff with wife, daughter, and son-in-law, Sax Fletcher and wife, John Clarkson, Clarence Fuller and wife, Julian Howe and wife, Pete Sanger, Sidney Blaisdell and wife, Gretchen Palmer, and Eli Berman.

The second item of business is the recording of numerous small bits of news, tuned to a joyful wave length. Mike Flett recently presented Ray Stevens'17 with the Gold Medal of the American Chemical Society. Our old friend Van Zelm, he of the delightful little wood folk in the *Christian Science Monitor* comics, according to announcements in the Boston papers of last June, is to be married again. Gretchen vacationed in Maine, extremely happy in her new job as secretary of the Parish of St. Paul's Church, Norwalk, Conn. (What a bishop she would have made with the small substitution of a y chromosome for one of the x chromosomes!) Last May, Sam Chamberlain had an exhibit of drawings, etchings, and photographs at the Essex Institute in Salem, Mass. The announcement whispers sweetly that, "tranquility and tender human interest provide the keynote for the group depicting scenes in Europe, the Near East, and New England." Massachusetts has recently had a new Commissioner of Correction who, with carefully reasoned logic, last May appointed George F. Magraw to head up the Prison Education Division. So, fellow classmates, just in case you step with undue zeal from the straight and narrow in Massachusetts, you could have the chance of being reeducated by an old Course II graduate. Under his direction the Norfolk educational program has had its ups and downs. During the war, when employees were hard to get, only an elementary grade group was taught. In 1948, the increased budget allowed for four teachers, and as many as 150 inmates were going to school. Currently, the Norfolk inmate education program is getting a lift for the second straight year from the voluntary efforts of a group from the Phillips Brooks House in Cambridge. Harvard students trek to Norfolk regularly to teach classes in literature, musical appreciation, psychology, and Spanish. They received no pay, but inmates gave tangible recognition of the gift by printing a "diploma" of thanks. Harold Collins, according to the April issue of *Foundry*, has taken on additional marketing activities on the West Coast.

This, by a peculiar logic of its own, leads us from west to south, for the third item of business. From Earl Collins comes a friendly letter bearing the address of Hazelton Road, Eustis, Florida. "Your brief note from our old familiar stamping ground in and around Jaffrey, Peterboro, and the vicinity was a pleasant surprise. The last time I recall seeing you was in Cambridge many years ago while my folks were still with us. You were holding forth mightily in the choir and I enjoyed the sermon very much. My reference to Peterboro arises from the fact that Mrs. Collins went to Sargent Camp there many years ago and was a swimming instructor as well. We used to vacation at Greystone Lodge which was in Antrim, and spent many happy days there between 1910 and 1923. I spent a couple of summers at

Harrisville with Myra Ellis who was our German teacher at Rindge. She regularly took several of the lads up there with her for part of the summer at her own expense, and I was one of the lucky ones. As a matter of fact, it was while I was there one summer that I first laid eyes on Mrs. Collins who was on a safari with the Camp girls, camping out on the very lake where I was swimming. It is a great many years since I have seen any of our classmates, primarily since I had to go into a form of semi-hibernation in 1944. A heart attack put me down for a while, but I was able to continue working under reduced load until 1955 when a serious illness, which nearly took Mrs. Collins, resulted in my retiring from active work. So, we moved to Florida where we are both happy and in much better health than had we stayed on in New York where I was associated with Union Carbide and Carbon Corp. for about twenty-seven years, and was involved with automotive anti-freezes and the development of their now famous insect repellent which is marketed under the trade mark 6-12. Life in Florida and other semi-tropical places would be a pretty sorry thing if it were not for the effectiveness of 6-12. While we were in New York, we lived in Great Neck and our family grew up there, one daughter and one son. They are both married and we have five grandchildren. Sally lives in Westbury, N. Y., while Ted has recently moved to Wichita, Kansas, where he is the local manager for the Hotpoint Appliance Sales Co. This means that if we wish to see the rest of our family and to get acquainted with our grandchildren, we have to take the triangle tour — Florida to Kansas to New York to Florida and this runs into about 5,000 miles. Our life in Florida is a busy one but the duties involved are quite different than those in the large cities where the horrors of commuting and of subway travel are something to be reckoned with. Here, we are busy in a leisurely sort of way since the things we do are generally out of doors and pleasant to contemplate. We live virtually out of doors in a house so designed that we are almost outdoors even when we are indoors. There are few days in the year when we cannot get out comfortably at some time. The climate has been a boon to us because of our difficulties and we now predict that if a reunion were to be held down here twenty years from now that we would be able to get there under our own power."

The final item on the agenda concerns those who are no longer with us. A short note to Bill Turner was answered by his wife with the news that he died on March 11, after an illness lasting five months. From a Claremont, N. H., newspaper clipping comes a report that Dean Sheridan Sibley died suddenly on February 15 at his home in Rochester, N. Y., where he had resided for the last decade. He is survived by his wife. Apparently there were no children. — F. ALEXANDER MACOUN, *Secretary*, Jaffrey Center, N. H.

1919

Another year has rolled by and we are now fast approaching our 40th Anniversary. Plans will get going soon.

We have heard that Captain Edward E. Saunders is back from Honolulu and is now located at Industrial College of Armed Forces, Fort L. J. McNair, Washington 25, D. C. Hope to hear more from him now that he's back in the States. Arthur Kaupe has moved from Pittsburgh and his new address is 6757 N. Ridge Ave., Chicago, Ill. Shee M. Lee has left Shanghai for Taipei, Taiwan. His new address is #7 Lane 145, Sin Sun Road, S. Sam Sherman's new home address is Scofieldtown Road, Stamford, Conn. Your secretary runs into Jim Strowbridge occasionally around town.

Howard L. Whitcomb writes from Peterborough, N. H., "Still a contractor and I guess like most of us our age, our real pleasure is our grandchildren! All the pleasure and none of the responsibilities."

News came to us of Fred A. Heilbron in the form of a booklet put out by the San Diego County Water Authority. Fred has been one of the pioneers of this project, and there is a fine tribute paid to him on the lead page, a small part of which we quote: "Mr. Heilbron was one of the first to declare that, with local sources limited, San Diego one day would have to tap the Colorado River. Those who scoffed remained to praise, for when the City took steps that firmed up entitlement to water from the river, the destiny of City and County was certain. Fred Heilbron, for inspired leadership in our constant quest for water, has earned the community's gratitude."

John Stevens, Jr. was elected chairman of the Marathon Corporation back around the first of the year. Sorry that this news item is so late but it was only recently called to our attention. John will continue to serve as president of the company and chairman of its subsidiary, Marathon Corporation of Canada, Ltd.

The M.I.T. Club of New York is going forward with plans for expansion and a continuing increased membership. Be sure to drop in when you are in New York City. — E. R. SMOLEY, *Secretary*, 385 Madison Avenue, New York 17, N. Y.

1920

Twenty of us attended at least a part of the Alumni Day activities last year, and an unusually large proportion brought their wives, no doubt because of the fact that wives were allowed to attend the dinner on campus. Here is the list, though there may have been others I didn't see: E. Franklin Badger, Mr. and Mrs. Harold Bugbee, Mr. and Mrs. Percy Bugbee, Mr. and Mrs. Alan W. Burke, Mr. and Mrs. Edward L. Cochrane, William F. Dewey, Herbert M. Federhen, 3rd, Thurston Hartwell, Henry W. Hills, Mr. and Mrs. Wilford P. Hooper, Mr. and Mrs. John W. Kilduff, Mr. and Mrs. James G. Moir, Mr. and Mrs. John M. Nalle, Robert D. Patterson, Mrs. Dorothea B. Rathbone, Mr. and Mrs. Edwin D. Ryer, B. Alden Thresher, Mr. and Mrs. Ernest P. Whitehead, Alfred Wason, and Elbridge Wason. If you see any of these fellows, they will assure you that the new deal for Alumni Day with everything on campus was a great success and thoroughly enjoyed by us all. If you can possibly arrange to get to one of these affairs, you ought to do so.

Close to the time of Alumni Day we were saddened to hear of the untimely death of Fred Bowditch. Fred had lived in Brookline all his life and was assistant treasurer of the Home Savings Bank in Boston. He is survived by his wife. I must also report the death of Francis Boettner early this year in Peabody, Mass.

Bill Dewey has received prominent attention at meetings and in the newspapers for his talks on the design work for the Texas towers. Bill is a partner with Anderson, Nichols and Company, which designed these towers, and is manager of the Architectural and Engineering Division.

Bob Sumwalt writes me from his home in Columbia, S. C., that he had a happy meeting with "Snug" Etter in San Francisco this summer and that it was the first time they had seen each other in 36 years. Bob reports that "Snug" has made a career record that we can be mighty proud of. He is president of the Air Reduction Pacific Company, a division of Air Reduction, Inc., and is also president of the Ohio Chemical Pacific Company, another of their divisions. His office is at 220 Bush Street in San Francisco. Bob says that he and "Snug" agreed to meet at the 40th Reunion, and we intend to hold them to it.

Art Merriman has a new address, 18313 Newell Road, Cleveland. Professor Louis Harris has left Wilmington, Delaware and is now at 249 Rutledge Road, Belmont, Mass. Francis Bunker is in Los Angeles. I sure would like to see him again because I have a vivid mental picture of him as an undergraduate. Our last names were adjacent in the alphabetical list so I always sat next to him in classes. I wish he would write us. Art Dopmeyer has come back from the Near East to Washington Headquarters of the U.S. Public Health Service. Bob Bradley has moved to South Dartmouth, Mass. Louis Bender is now in Topeka, Kansas. Amasa Castor has left Florida and is now in Manchester, N.H. Francis Meade has done the same thing, only he is now in Rockville Center, N.Y. Jack Bartholomew is with the Eaton Manufacturing Company in Cleveland. John Hale has moved from Chevy Chase, Maryland to Hampton, N.H.

It is a pleasure to report that we have some distinguished classmates on the M.I.T. Corporation Visiting Committees. Herb Fales is on the Committee for the Department of Mechanical Engineering, Ed Burdell for the Department of Regional and City Planning, and Archie Cochran for the Department of Food Technology. — HAROLD BUGBEE, *Secretary*, 7 Dartmouth Street, Winchester, Mass.

1921

Creetings! We're still celebrating our 35th Anniversary! Welcome to our 35th season of monthly meetings around the friendly 1921 hearth, particularly at this time of special festivity. There's lots of news of our reunion and about those of you who have so kindly kept us advised of your doings. We'll run it all as time and space permits in this and succeeding issues. Thanks for your help. Keep on sending in news.

June 8, 9, 10 and 11 of the year 1956

will ever remain memorable to some 131 people who took part in one or another of the various events which marked the observance of the 35th birthday of the Class of 1921. The three-day Class reunion at the Sheldon House, Pine Orchard, Conn., and the several events of Alumni Day on campus in Cambridge, provided joyous occasions for members of the Class to renew the strong bonds of friendship and affection which have provided the solidarity of our firm Class unity for all the years since we entered the Institute.

For your Secretary, the fun started when Munnie Hawes rolled up to New-ark Airport in a brand new Cadillac and picked us up along with George Gokey, who flew in from Jamestown, N.Y. Across the George Washington Bridge we picked up Sumner Hayward, and the reunion had really started! The afternoon cocktail party at the Sheldon House brought out many who have never failed to attend. As usual, there were numerous "first timers," who were belatedly catching the spirit of good fellowship for which these get-togethers have been unexcelled down through the years. Dinner that evening was a hilarious affair, enhanced by Ray St. Laurent and Bob Miller presenting the latter's superb slide and movie record of the Class. Who will forget the "That's my Helen!" episode and the side-splitting sequel provided by Warrie Norton, with the assistance of Fritz and Mrs. Ferdinand. Among the welcome guests were Bill Sherry's sons, Billy and Dick. Missed by all were Harry Field, Ed Farrand, Jack Kendall, and Larry Davis'22.

Sports the next day, sailors braving the briny deep on Baldy Baldwin's yacht, large groups relaxing on the lawns and verandas, another cocktail party and then the big banquet to top all events. Mementos for all were the mysterious neckties, designed by Chick Kurth, with the camouflaged "M.I.T. 1921" legend. There were golf prizes, door prizes and, most appreciated of all, the two "autographed" M.I.T. chairs, made and inscribed by Rod Bent and presented by the Class to your President and Secretary. On Sunday, the group regretfully parted, many heading for Technology and Monday's Alumni Day.

Back in Cambridge, we had more opportunities to meet, especially at the 1921 table at the luncheon in Du Pont Court, at the afternoon cocktail party near the new auditorium and with the whole Class seated together at the huge banquet in the Rockwell Cage. Reunion Chairman Mel Jenney and the many who helped him, including Ted Steffian, Chick Kurth, Irv Jakobson, Mich Bawden, and Jack Rule, deserve our sincere thanks and gratitude for arranging an unsurpassed series of events and seeing to it that they were properly organized and that good care was taken of all those in attendance.

Among those present at the various gatherings were: Fred Adams, Wally and Mrs. Adams, Al Bachmann, Henry Baldwin, Ollie Bards, Jack Barriger, Mich and Mrs. Bawden, Rod Bent'19, Harold Bixby, Charlie Briggs, Larry Buckner, Buzz Burroughs'20, Larry Chellis, George Chutter, Cac Clarke, Ed Chilcott, Phil Coffin, Vern Cole, Bob Cook, Josh Crosby,

Andy Deane, Chick Dubé, Ed Delany, Bill Emery, Fritz and Mrs. Ferdinand, Ben Fisher, Harty Flemming, Jack Giles, Fish Gilbert¹⁹, Luther Goff, George Gokey, Harry and Mrs. Goodman, Judge Greene, Mark Hamburger, Paul Hanson, Mahlon Hartley, Bob and Mrs. Haskel, Joe Hauber and Miss Leona Hauber, Munnie Hawes, Sumner Hayward, Jack Healy, Roy Hersum, San Hill, Dug and Mrs. Jackson and Mrs. D. C. Jackson, Senior, Irv Jakobson, Mel and Mrs. Jenney, Larry Jordan²³, Algot Johnson and Miss Carla Johnson, Joe and Mrs. Kaufman, Bill Kennedy, Gus Kinzel, Chet Knight, Chick Kurth, Malcolm Kurth⁴⁹ and Mrs. Kurth, Moose LeFevre, Leon Lloyd, Bill Loesch, Ted McArn, Ed and Mrs. MacDonald, Don McGuire, Dick McKay, Charlie Mackinnon, Alex McMorran, Lou Mandell, John Mattson, Bob Miller, Joe Morrell, Lew Moss, Harry Myers, Phil and Mrs. Nelles, Herb Nock, Warrie Norton, Abba Orlinger, George Owens, Jack Parsons, Leo and Mrs. Pelkus, George Pollock, Lark Randall, Bill Ready, Holland Robb, Helier and Mrs. Rodriguez, Ted Rose, Harry and Mrs. Rosenfield, Jack Rule, Ray and Mrs. St. Laurent, Steve Seamos, George and Mrs. Schnitzler, Palmer Scott, Rufe Shaw, Bill Sherry, Dick Sherry, Bill Sherry, Jr., Saul and Mrs. Silverstein, Dick Spitz, Ted and Mrs. Steffian, Harold Stose, Bill Wald, Al Wason, Bob Waterman, Joe Wenick, Frank and Mrs. Whelan and Miss Anne Whelan, Charlie and Mrs. Williams, Ev Wilson, Harry Witherow, Ed Wylde, and Miles Zoller.

One of the most welcome new developments at Alumni Day was the announcement by President Jim Killian²⁶ of the selection of Jack Rule as the Institute's Dean of Students. Jack has been closely identified with the educational field since 1930 and has been on the Technology faculty since 1936, most recently as Professor of Engineering Graphics, Head of the Section of Graphics and Head of Course IX. Jack has always been active in Class affairs and it is with great personal satisfaction that we extend to him, for the entire Class, our congratulations and best wishes for what we know will be an outstandingly successful administration of an important office. Not to be outdone by this good news of his old-time St. Louis buddy at the Institute, Jack Barriger was elected President of the Pittsburgh and Lake Erie Railroad, thus adding another top post to his distinguished career in the field of railroading that already included the presidency of the Monon, vice-presidency of the New Haven and, most recently, of the Rock Island. Congratulations and best wishes to you, too, Jack.

Jack Whipple, Vice-president of the M.I.T. Club of the Philippines, cabled from Manila to the Sheldon House his greetings and regrets that he was unable to attend. A giant card from Graciela and Helier Rodriguez tells of a wonderful trip from the Reunion to the West Coast and back, together with Alumni Association Vice-president Lobby Lobdell¹⁷ and his charming wife, Conchita. It continues: "We enjoyed the hospitality of M.I.T. alumni at Duluth, Minneapolis, Seattle, Denver and Tulsa, where Bill Sherry gave a big party which was the climax of our

trip. Among the guests were Bill and Mrs. Emery and their son, Willard, M.I.T.⁵⁰. In Minneapolis, we met Wint and Mrs. Dean."

Gus Kinzel, Vice-president in charge of research, Union Carbide and Carbon Corporation and member of the M.I.T. Corporation, is in the news for his plea that more women enter the field of science. He points out that, although women make up a third of the nation's working force, only one of 20 scientific workers is a woman. He adds that his firm could make room for 500 young women scientists in addition to the current 630 on the staff, of whom only 23 are women. Your Secretary was most gratified last fall to receive the honor of M.I.T.'s first award of the Bronze Beaver to a class secretary. This year we have been the happy recipient of another beaver award, this time the Silver Beaver of the Boy Scouts of America. Reviewing the current activities of many of the Class, it is good to note how many find the time to devote their efforts to Scouting and other youth movements.

Stewart P. Coleman and his family were among the passengers on the ill-fated *Andrea Doria*, and we are glad to report that they suffered no injuries. It is with profound sorrow, however, that we record the passing of three members of the Class and extend to their families sincere sympathy on behalf of the entire Class. We have belatedly learned that Maxwell Kellogg Burckett died on May 13, 1956, the day after we talked with him by 'phone and had his assurances that he was fast recovering from a heart attack. A much-loved friend of many in the Class, a staunch supporter of 1921 activities and those of M.I.T. in general, he will be sorely missed by all of us. Born in Brooklyn, N.Y., on February 15, 1898, he prepared for Technology at Montclair High School, where he was active in early "wireless" work as an associate of Dr. DuMont of television fame. At the Institute, he was a member of Theta Delta Chi and was in Course VI. For many years he had been engaged in various executive capacities with the Vick Chemical Co., International and Morse Divisions, most recently in charge of packaging development and production. A charter member, secretary, vice-president and president of the M.I.T. Club of Northern New Jersey, he was also active in his community of Maplewood, N.J., as secretary of the Civil Defense Council. He is survived by his wife, the former Ethel Morrell, and two daughters, Phyllis E. Burckett of Maplewood and Mrs. William N. Brandt of Baltimore, Md.

Miss Nellie Jefferson died on December 11, 1955, in Austin, Texas. A native of Austin, she was graduated from the University of Texas in 1915 with a bachelor's degree. She was associated with us in Course IV and received the S.M. degree in 1921. She had taught mathematics at Baylor College and, prior to her recent retirement, she had been the Director of Dormitories of the University of Vermont. A member of the American Association of University Women, she was also active in the Society of Vermont Craftsmen and was Vice-president of the National Executive Housekeepers Association.

Thomas Haskins Gresham died in No-

vember, 1.55, in Richmond, Va. Associated with us in Course XV, he had been Director of the Wise Granite Construction Company of Richmond and Secretary of the Capitol Hotel, Inc., of Richmond. He was a member of the M.I.T. Club of Virginia.

May you and your family enjoy a happy Thanksgiving. — CAROLE A. CLARKE, Secretary, Federal Telephone and Radio Company, 100 Kingsland Road, Clifton, N.J.

1922

Alumni Day on Monday, June 11, 1956, was a great success for those of the Class who attended. The move to an on-campus party with the wives invited, coupled with the outdoor bar at which the drinks were on the house, seemed to all a step in the right direction. Those on hand for luncheon in the Great Court and/or dinner in Rockwell Cage were: Ed Hobbs², Bill Russell², Fred Dillon, Ted Miller², Marjorie Pierce, Dewey Goddard, Whit Ferguson, Leon Medalia, Tommy Thompson, Yard Chittick², Fay Lincoln², Bob Tonon², Clate Grover, Bill Riley², Dave Harris, Bill Hyland, Randy Myer², Walt Saunders, Ed Terkelson², Hyman Rosengard², Parke Appel², John Strieder, Ros Sherbrooke, Warren Ferguson², Paul Winsor, Buck Eacker, Oscar Horovitz², Frank Wing², Maurice Gordon², Winthrop Potter, Fearing Pratt, John Goodnow, Conant Webb², and Luciano A. Preloran, who came all the way from Buenos Aires. The names above bearing asterisks were accompanied by their wives. Preloran's address, by the way, in Buenos Aires is Corrientes 531, where classmates will find a warm welcome.

On the previous day, Sunday, June 10, Frank Wing and his wife Esther entertained a sizeable group of the foregoing at his home in Weston. Those additionally present at Frank's who could not come to Alumni day were: Jack and Mrs. Hennesy, Joe and Mrs. Keenan, Herb Ham, and Jack and Mrs. Starkweather.

Of the prizes distributed by lot at the Alumni Day dinner in Rockwell, Ed and Mrs. Hobbs won a two-weeks trip to Washington. Warren and Betty Ferguson collected a sweater and sun glasses, and Hyman Rosengard also got a sweater. No one went home empty-handed, however, for the generous donors of the gifts provided all kinds of useful things running from puzzles to five pound boxes of writing paper.

Bill Rich, retired these many years, has shifted his permanent address from Andover to Cherry Lane, Ogunquit, Maine. Art Meling, who has been with Carrier Corporation, Syracuse, N.Y., since 1928, now heads up the newly created Weathermaker Department.

If anyone needs the services of a crack professional photographer, you need go no farther than our classmate Fay Lincoln of New York City. Fay is an acknowledged expert in this field and evidence to that effect is shown by the cover photograph on the June issue of the Review, which picture Fay took. Lachlan Mackenzie, one of our few remaining bachelors, is on the go again. His address in July was Hotel Carrera, Santiago, Chile.

Reason for move unknown to secretary. Joseph F. Cook died on May 31 at the age of 57 at his home in Nottingham, N.H. Joe was a veteran of World Wars I and II and retired in 1946 with the rank of Colonel. He moved to Nottingham in 1942, and for the past four years had been teaching science at Hampton Academy and High School. He is survived by his wife, two sons, and two daughters to whom the sympathy of his classmates is extended. — C. YARDLEY CHITTICK, *Secretary*, 41 Tremont Street, Boston, Mass. WHITWORTH FERGUSON, *Assistant Secretary*, 333 Ellicott Street, Buffalo, N.Y.

1923

Trust all of you had a nice summer and a good rest. We had one but not the other.

Nearly 30 members of the Class, many of them with their lovely wives, were present for Alumni Day festivities on June 11. Among those attending were: Mr. and Mrs. Ed Averell, I, Mr. and Mrs. Ray Bond, XV, John Burchard, IV, Charlie Burke, VI, Harry Chatto, IX, Mr. and Mrs. Bob Colburn, IV, Ben Cooper, XV, Mr. and Mrs. Hugh Ferguson, XV, Louis Greenblatt, II, Bill Greenough, VIII, Mr. and Mrs. Herb Hayden, II, Mr. and Mrs. Frank Haven, II, Joe Hetzel, VII, and son, Christopher, Ollie Hooper, I, Penn Howland, XV, Mr. and Mrs. George Johnson, II, Mr. and Mrs. Dave Kaufman, X, Elliott Knight, XV, Mr. and Mrs. Forrest Lange, II, Mr. and Mrs. Harry Nanajian, V, Mr. and Mrs. George Nevers, II, Gerry Putnam, I, Mr. and Mrs. Horatio Sexton, XIII, Ed Rue, VI, Dave Skinner, XIV, Mr. and Mrs. Roy Sterling, II, Mr. and Mrs. Julius Stratton, VI, Mr. and Mrs. Allard Valentine, I, Mr. and Mrs. Roy Wagner, II, and Jack Zimmerman, II. Penn Howland reports many members of the Class took a leading part in various activities, such as John Burchard's participation in the graduation exercises and the appointment of Julius Stratton as Chancellor, which speak for themselves. Dave Skinner, as Master of Ceremonies and Chairman of the Prize and Entertainment Committee, kept everyone on edge for the lucky winners. Bond and Ferguson came away with packages of argyle knitting yarns (what socks we can expect to see next winter!). Unfortunately, Kitty Kattwinkel, XV, who was scheduled to be moderator at the morning Symposium in Kresge Auditorium, was laid up in the hospital with a broken ankle. Rumors reach us that he was happily(?) ensconced in the Maternity Ward on the 5th floor, where pretty nurses were frequently asking, "Has Kitty produced yet?" (Sort of a mailman's holiday for Kitty, being laid up in the hospital.)

Ben Cooper, XV, of Taller and Cooper, New York City, continues in the spotlight with his battle to maintain honesty at the toll gates. Did you read the article, "Swindlers on the Turnpikes," that appeared in the June 30 issue of the *Saturday Evening Post*? It makes fascinating reading although it may reduce your faith somewhat in the honesty of humanity — or at least, a segment of it.

The New York Telephone Company

established a Telephone Engineering Pilot Organization in Scarsdale, New York, which probably will be the forerunner of similar engineering divisions throughout the Bell Telephone System. None other than Francis J. Kurriss, II, has been placed in charge. With more than 330 employees under his supervision, success of the experiment seems assured. Incidentally, Frank lives in Scarsdale. He and the Divisional Superintendent assured your scribe that there is no collusion in the selection of the new headquarters. I hope he has better success in making his story stick than I had when the Improved Risks Mutuals moved from New York City to White Plains. A native of Dorchester, Mass., Frank joined the Telephone Company in 1924, and has risen to this present post through the engineering and operating staffs of the New York Telephone Company and the American Tel and Tel. He is a member of the American Institute of Electrical Engineers, the Technology Club of New York, and the Yankee Division Veterans' Association.

A letter from Leslie W. Powers, XV, informs us that he has been transferred to the Home Office of the Buffalo Insurance Company where he will have charge of underwriting fire insurance business for the entire Eastern seaboard. Congratulations and best wishes! J. W. (Jack) Beretta, IV, President of the First National Bank of San Antonio, Texas, has a very lovely picture in the June 17 issue of the San Antonio *Sunday Light*, showing his three-year old daughter, Jackie, sewing a button on his sleeve. Jack, you must have a very lovely wife to produce such a good-looking daughter. Congratulations!

Don Severance, Secretary-Treasurer of the Alumni Association, supplies the information that Robert L. Hershey, X, and Eger V. Murphree, V, were nominated for the positions of Alumni members on the M.I.T. Corporation Visiting Committee, Department of Chemistry. The purpose of the Committee is to give the Department the benefit of advice and opinions of an interested group other than those actually connected with the Faculty or Administration.

We regret to report the passing of Maurice O. Guerin, II, on June 11, at Narragansett, R.I., after a long illness. He was President of the River Mills Corporation at Fall River, Mass., and was associated with the Guerin Mills at Woonsocket, R.I. He is survived by his parents, three sisters, and two brothers.

Al Perlman, XV, President of the New York Central, sent through a report on the Annual Meeting of the shareholders of that famous railroad. It made most interesting reading. Al must be doing a good job because one of the employees was most courteous to your scribe following an automobile breakdown. Thanks, Al! Sea Products Corporation, under the guidance of Milton E. Parker, VII, is completing a pilot plant study in New Bedford, Mass., to enrich chicken and animal feed by means of vitamins obtained from the so-called "trash" fish, common off the shores of New England. We wish them success.

Spent two lovely afternoons on vacation — one with Frank Haven, II, and his wife, the other with Ray Bond, XV, and his

wife. They both sent regards to you all.

Now is the time for all good members to come to the aid of their Secretary with a plentiful supply of news items for the various issues during the coming season. — HOWARD F. RUSSELL, *Secretary*, Improved Risk Mutuals, 15 North Broadway, White Plains, N.Y. WENTWORTH T. HOWLAND, *Assistant Secretary*, 1771 Washington Street, Auburndale 66, Mass.

1924

Another summer gone. Somehow they seem to go faster and faster. One more sign, so they tell us, of advancing years. Not all of us, however, are feeling their weight. Early in September, the Max Ilfelds, after a summer at home in Taos, took off for a winter in foreign climes. A card written on the Oslofjord and mailed in Bergen says "Have our Thunderbird aboard and plan to do a little wandering in the byways of Europe." They'll head south when cold weather comes, Italy, Greece, and so forth. Not a bad prospect; Max in a beret and Bertha in lederhosen thundering down the byways and autobahns.

Had an intriguing call from another retired classmate this summer who is following in Max's footsteps by going back to school. Two years ago Franklin O. Billings retired after a lifetime in government service. Frank was one of our wounded World War I veterans. Recurrences of his war time gassing kept him from graduating. Now, with no more daily duties, with his children grown up and gone from home, he decided to go back to school and get that degree he'd missed. It took a lot of soul-searching, says Frank, the idea of an "old man" sitting in class with a bunch of kids. Could he still make the grade? Could he stack up to the competition of young brains? Last fall he took the plunge and enrolled at the University of Washington. To his surprise, he found more than 100 other students 50 years and over. To his pleasure, he found he could not only cope, but soon the kids were coming to him for help. It set him up so that now he wants to come back to M.I.T. for a Master's. Further, and this is the most intriguing part of the whole story, he has become much interested in the problem of the old, their increasing numbers, their inadequate pensions, their lack of motivation and consequently decreased self-esteem. And he has an answer. Why not set up a labor reserve?

This all sounds so eminently logical and worthwhile that it's worth setting down in some detail. When war comes the Armed Forces immediately call out their reserves. Who replaces them in the factories? Why not a labor reserve for just such an emergency? Many of our machinists, technicians, and skilled workers are good for a long time after they have retired. Frank wants to organize them formally, under an agency which will give them continuing work of small volume making parts for essential industries. This will keep their hands in, bring them extra income, and give them the feeling of still contributing importantly, if in decreased volume, to the welfare of the country. These are good objectives in themselves,

even if no emergency ever arises again to call them back full time. The idea is being bandied about in Washington now, and you may hear more of it in the future.

Now let's see what's been happening to the rest of you this summer. Delco's Refrigeration Equipment Division has a new Sales Manager, Robert O. Dehlendorf. This is a shift for Bob from the same spot in their F.H.P. Motors Division, and lets him stay in that beauty spot of Ohio, Dayton. Chief Engineer Simond's postcards are nothing if not confusing. The latest batch included an iceberg, a polar bear, an Eskimo (from Narsarsuak, Greenland), and then a gal in a Bikini! Hank still gets around. President George Neitlich of the American Society of Chartered Life Underwriters sends an impressive program of their summer conferences in Wisconsin and California. A note from the former says "back to student days again." Does he mean the President is a student?

Here's a bit of anticlimax. Movie Mogul Bill MacCallum writes that all at one time the Cy Duevels, the Jimmy Crists, and the Blay Athertons arrived in Los Angeles to pay their respects. Should have been the occasion for an all-out West Coast reunion. So what happened? "I happened to be out of town that weekend!" A happier get-together was that of Hudson Hoagland and the Ford Foundation. The Worcester Foundation for Experimental Biology, of which Dr. Hoagland is executive director, received a \$400,000 grant in June. It will be used for further studies in mental illness. This next is evidently a high honor, though a bit obscure to your secretary. Our State of Maine coed, the Reverend Gertrude C. Harris of Phillips, is one of four women ministers admitted to voting membership in the Maine Conference. Sounds like something of a last step in the emancipation of women. One of her fellow voters was the Reverend Mrs. Henrichsen, whose *Seven Steeples* you may have read.

Blanchard D. Warren, who went to the West Coast for Bird Machine Company, has moved to other, and we trust greener, fields. He's now with the Diesel Machine Company, in Portland, Ore. It's impossible to keep up with a State Department man. Gardner MacPherson, late of South America, Paris, and Washington, now has a Navy FPO address out of San Francisco. Don't have the full story on this one yet, but Ray Hamilton, after all these many years with Linde, is now Manager of Administration at the Research Laboratory of Tonawanda and Speedway Laboratories. Is this part of Linde—Is this a new venture? If so, is it a stock car or a sport car speedway? Or maybe a dog track! I wish people would be more explicit.

Clarence Redden is much more informative. After many years learning to be a Mainiac, Clarence's company, Hollingsworth and Whitney, merged with Scott Paper Company. Clarence is now Division Manager, Pulp Section, Staff Engineering Department in Chester, Pa. Next time you buy a few rolls of Scott Tissue think of Clarence. And G. Wheeler has made a switch. For some time he's been selling Sentry electric furnaces. Now he's selling the same thing for C. I. Hayes, Inc., as Sales Engineer, Chicago.

A few honors have come to some of our

classmates recently. Jack Hennessy, whose latest major engineering feat is the current building of Compton Laboratories, was awarded an honorary Doctor of Engineering degree by Manhattan College last June. Dr. Hennessy, please, from now on. And the Illuminating Engineering Society has chosen as its president for this year, Marshall N. Waterman. Brings back memories of when Waddy and your secretary tried hard, but unsuccessfully, to become Able Seamen. We had great plans for seeing the world. Instead, for many years, we saw I.E.S. conventions together. But the greatest honor, by far, is that heaped on Tony Rosado. An Havana paper headlined the story "Nombran presidente de la Cuban Telephone Co. al Ing. A. Rosado." Tony has been in the telephone business since he graduated as a Naval Architect. Now, after a seven-year term as Executive Vice-President, he becomes President; "the first time in the history of the Cuban Telephone Company that a local man has been named President." One thing Tony can't do, as Paul Cardinal discovered, is provide telephone service in certain areas until some present user dies off. Sounds confusing, but it's an involved government-public utility mixup. If the knot can be untied, Tony is the man to do it.

So much for now. Let's see, what should I be wishing you now? It's a bit difficult in mid-September to know just when the November issue will arrive, but Horrible Hallowe'en or Happy Thanksgiving to you, whichever is most appropriate. — HENRY B. KANE, *Secretary*, Room 1-272, M.I.T., Cambridge 39, Mass.

1925

To start the new year, a report on the 1925 attendance at the Alumni Day activities is in order. The local group who were present included; Sam Caldwell, Fred Duncan, Bob and Mrs. Hodson, Max and Mrs. Levine, Henry and Mrs. McKenna, Ave and Mrs. Stanton, Dave and Mrs. Goldman, Jim Howard, Ed McLaughlin, Ed Kussmaul, and your Secretary. To the delight of all of us, Henry Bacon put in an appearance and took part in all of the activities. None of us had seen Henry for many years, and it was a real pleasure to renew our acquaintances.

As most of you will have read, Ave Stanton has assumed the position of Alumni Fund Director for this year, and I know that he has the best wishes of all of the Class in this undertaking. An Alumni Fund Conference was conducted at the Institute on September 7 and 8; and the Class of 1925 was represented by Ave Stanton in his new position as the Fund Director, Chink Drew, the Class Agent, and Ed Alexander and Max Levine as Regional Representatives.

Among news items which have come to light since last report are the following: Ed Murphy, who has been with Carbide and Carbon Chemicals Company since 1925 has been named Manager of Sales Control for the Company. He was Manager of the Company's Boston Sales District prior to this promotion. Last spring, Ello Richardson was made General Manager and Director of the Cambridge Gas Company, succeeding Gordon Howie'13,

who has retired. Mr. Richardson went with the Gas Company in 1925 and has held many assignments, having progressed through the superintendency of the Production Department to general superintendent, and on June 1, 1955, became assistant to the General Manager.

Just as these items go to press, a letter has come in from George Blonsky who, after many years in the mining atmosphere of the wide open spaces, is now located in New York City. I am sure this will be of real interest to many of George's friends, and those of you in the New York area may want to contact him at F. H. McGraw and Company.

Henry Williams very kindly sent a copy of the *Army Times* to your Secretary. There is a picture of Henry himself as a colonel and camp commander of the 311th Signal Group of Baltimore, which went through two weeks of summer training during the past summer. This is the fifth year that Henry has served as a camp commander, and the *Army Times* certainly gave him a good boost.

It is with sorrow that the death of two classmates is reported. Joe Kaplan, who was an executive of the Lincoln Oil Company for twenty-six years, died on June 19, 1956, leaving his wife and one son; and Gerald H. Moyer died in Chicago, Illinois, on July 28, 1956. — F. L. FOSTER, *Secretary*, Room 5-105, M.I.T., Cambridge, Mass.

1926

The timing for these notes has been perfect. Yesterday was our last yacht race of the season — today, September 9, the mast comes out of the boat and she goes to bed for the winter. It's really a rather sad duty but it does give us a little spare time for other things, such as writing class notes. All summer long, whenever any item of class interest came along, we tossed it into a wooden chopping bowl upon the balcony and now the bowl is quite full. It's not running over though, so keep it coming.

This month we won't even dip into the bowl, however, because we have a reunion to report, and if we merely list the names of classmates who attended, it will just about fill our allotted space. I asked reunion chairman Cedric Valentine to send me a list of all who were there and he did so on the back of a penny post card! How he ever printed all these names in that small space by hand is beyond me — 99 members of the class. Val did a fine job organizing the reunion, and it's the first class reunion for which your class secretary was unable to attend a single committee meeting. As usual, the same local crew, who have the advantage of being on the spot, organized the affair. Don Cunningham arranged transportation to Coonamessett for those out-of-towners who needed it, and I had the pleasure of Wes Hemeon's and Morris Minsk's company in my car. The two old sports in charge of sports as usual were Bill Meehan and Joe Lewis. It's amazing how our sports activities have slowed down — the whole class has slowed down to my level. Jack Larkin handled the publicity sent you in advance and as always did an able job. "Pink" Salmon handled the finances,

and his final report showed that the reunion made a profit of \$11.64, which has been added to the class treasury.

Everyone who paid reunion dues has been sent a copy of the reunion photograph, and since we are to list the names of all who attended we will attempt to list all names in the photograph in order, and then we will list the names of those who for an explainable or unexplainable reason did not get into the picture. We have called the rows first, second and last — there may be a little weaving in the rows but we hope you can follow our line up. *Front Row:* Edgar J. Doolittle, Earl C. Wheeler, Carleton J. Everett, Kenneth S. Lord, Abe White, Howard Humphrey, Martin M. Fireman, Charles E. McCulloch, Albert P. Libbey, Ben V. Howe, Richard S. M. Lee, G. Warren Hamblet, Joe L. Lewis, C. Herman Olander, William Meehan, William C. Sessions, Frank M. Toperzer, Stephen F. Spencer, George W. Smith. *Second Row:* Donald B. King, C. Valentine, Cheney Salmon, Bruce T. Humphreville, Millard M. Greer, J. P. Warner, A. Donald Green, George F. Brousseau, Morris L. Minsk, R. Gordon Spear, William M. Davidson, Ronald J. Martin, Earle D. Lissner, Richard W. Johnson, Dwight K. Taylor, Clifton B. McFarland, Arthur F. Johnson, William F. Rooney, Donald S. Cunningham, Alton S. Heyser, Elton E. Staples, Leonard Milano, Martin Walter, James A. Drain, E. Bird Kelly, Lyman Billings, Henry C. Rickard, John Drum, Charles R. Milem, Frank W. Schreiner.

Last Row: Emerson W. Eddy, David A. Shepard, Lebaron C. Colt, William H. Latham, Edward J. McGrew, I. Austin Kelly, Douglas P. Jeppe, Fred P. Broughton, Louis J. Darmstadt, Charles Rich, Natale Gada, Raymond Mancha, Morton Woodason, Richard H. Pough, Giles E. Hopkins, Arthur F. Underwood, G. Malcolm McNeil, William H. Hamilton, Allen B. Bassett, Eliot N. Bidwell, G. Richard Peterson, John P. Larkin, C. Marvin Pickett. *Not in Picture:* Harvey C. Abbott, Martin J. Bergen, Raymond T. Bete, William H. Borghesani, Rexford A. Bristol, Chester F. Buckley, Basil G. Constantine, Laurence G. Cumming, Robert T. Dawes, Robert C. Dean, Anthony P. Gabrenas, Thomas D. Green, Crockett A. Harrison, Wesley C. L. Hemeon, Harry F. Howard, John B. Jacob, James R. Killian, Philip S. Mancini, Benjamin Margolin, John L. Ostborg, Benjamin P. Richardson, Robert W. Rogers, Harold P. Ryan, Martin E. Staley, Waynard Vosper, George W. Wardner, Franklin Washburn.

We had hoped Flint Taylor would be in shape to attend but his lung operation was a bit too close behind him. A telegram from Flint expressing his regrets at missing his first reunion proved that he was there in spirit however, if not in spirits. An invalid with a busted leg by the name of Drum was very much present, however. Johnny had written that he was sending a cooler for a class door-prize, and we said thanks, expecting some kind of an insulated tin can to take on picnics. However, it took a couple of piano movers to get this particular "tin can" into the inn. It turned out to be a beautiful stainless steel electric refrigerator ideally suited for a home bar. Who was the lucky

classmate to win it? None other than a guy by the name of Erle Wheeler who claims it was the first thing he has ever won. The Class extends sincere thanks to Johnnie Drum for the finest reunion prize we have ever been able to offer. Bob Dawes contributed elastic belts of a new design and the supply of large ones went in a hurry — at least I had to scratch to find one. The cans of lighter fluid by our Gulf Oil classmates, Fred Broughton and Cedric Valentine, helped me later in the summer when I had a vapor-lock in my car one hot day. I squirted a half can of lighter fluid into the carburetor and started the car which had stalled in the Massachusetts Avenue underpass at an hour when all garages were closed.

I'll have to wind this up shortly because of space limitation but not without mentioning an incident that happened enroute to the reunion. Bill Forrester was stricken with appendicitis just before reunion but was well enough to receive visitors at the Greenwich Hospital. Consequently, a pre-reunion reunion was held at Bill's bedside with classmates Mancha, McGrew, Kelly, and Kelly doing the toasting. I dislike ending these notes as I must this month, but it seemed inappropriate to mention earlier a sadness that entered our reunion. Many of us knew that Stan Cheney had been seriously ill. He died at nearby Plymouth on the eve of reunion, and a group of classmates left on Saturday afternoon to attend his funeral. Stan was vice-president of the Plymouth Cordage Company, and during World War II had been chief of production in the Chemical Warfare Service. His life was full and successful. For the Class, your secretary extends deep sympathy to his wife, Dorothy, and his son and daughter. There is still reunion material in the bowl and we will continue with it next month. — GEORGE WARREN SMITH, *Secretary*, c/o E. I. du Pont de Nemours and Company, Inc., Elastomers Division, 140 Federal Street, Boston 10, Mass.

1927

You will hear a lot more in succeeding months about plans for our 30th Reunion. The reservation is all set for Oyster Harbors Club at Osterville on the Cape, June 7 to June 9, 1957, and the plans are now in the hands of Bob Bonnar. Your secretary hopes to get out an addendum to the Class Book, published at the time of our 25th Reunion.

Class Day last June brought out the following from '27: D. C. Arnold, A. K. Berle, J. C. Burley, E. Chase, J. F. Collins, M. Davies, H. E. Franks, G. D. Jackson, F. Marcucella, H. A. Moineau, E. F. Stevens, W. L. Taggart, H. C. Trask, and M. P. Robbins. Almost all were accompanied by their wives.

Irving M. Plant died suddenly of a coronary thrombosis on August 18. At the time of his death he was social economist of the Consolidated Edison Company in New York City, and lived at 188 West Glen Avenue, Ridgewood, N. J. He joined Consolidated in 1935 following work with the Public Service Electric Company and Brooklyn Edison Company. He had been most active in church and symphony activities in Ridgewood.

Russ Westerhoff's son will enter M.I.T. this fall after completing four weeks summer Air Force training. Rear Admiral Kniskern, U.S.N., is the new commander of the New York Naval Shipyard in Brooklyn. C. Wesley Meytrott has been elected a trustee of Adelphi Academy. Wes is a leader in Brooklyn civic affairs and serves as a director of the Brooklyn Cancer Committee. His current address is 770 St. Marks Avenue, Brooklyn 16, N. Y.

Two members of our Class have been nominated by the Alumni Association for the positions of Alumni Members on the M.I.T. Corporation Visiting Committee: Clarence L. A. Wynd and James A. Lyles.

The Underwood Corporation has appointed Andrew Anderson as Vice-president in charge of manufacturing. Mr. Anderson, formerly manufacturing vice-president and director of the Monroe Calculating Machine Company, is an electrical engineering graduate.

The headquarters of the United States Seventeenth Air Force was moved during the summer from Rabat to Tripoli, Libya. This transfer will continue with a change in commanders. Major General Frederick E. Glantzberg will go to Washington to organize an inter-service airlift for all U. S. armed forces. This will absorb the air transport services of the Air Force, Army and Navy. — J. S. HARRIS, *Secretary*, Shell Oil Company, 50 West 50th Street, New York 20, N. Y.

1928

On June 11, at the Annual Alumni Banquet, the Class of 1928 was represented in good force. This was the first year that all activities were shared by the ladies, including the evening banquet. Perhaps it was for this reason that many of the wives were in attendance. Our record shows that the following were on hand: Elbridge Atwood, Max Bearon and Mrs., Bill Carlisle, Jack Chamberlain, Dud Collier and Mrs., Joseph Collins and Mrs., Jim Donovan and Mrs., Bob Harris and Mrs., Walter Hildick, Ralph Jope and Mrs., Art Nichols and Mrs., Theodore Pierce, Edward Poitras, Rudy Slayter and Mrs., Walter Smith and Mrs., O. P. Susmeyer, Ray Wofford and Mrs., Gilbert Unversatz, Eugene Boehne, Maurice Beven and Mrs., Dave Donovan, Abe Woolf and Mrs., Carney Goldberg and Mrs., and Thurston Hartwell and Mrs. Most of those attending remained to enjoy the banquet and give-away program in the Rockwell Cage.

Chemical and Engineering News for June 4, 1956, had this to say about Al Gracia: "Albert J. Gracia, general manager of Goodyear Atomic Corporation from its beginning in 1952 until the first of the year, has been given the P. W. and Florence Litchfield Special Award of Merit by Goodyear Tire and Rubber. He is honored for his leadership in putting AEC's Pike County gaseous diffusion plant into operation efficiently." Al, we congratulate you on behalf of the Class for this new honor and for another job well done.

A news release by Lear, Inc., dated Santa Monica, Calif., July 26, 1956, gives us the following information: "Lazare Gelin, president of Lear Interna-

tional, Inc., for the past ten years, has resigned to become an independent foreign trade consultant in New York. In this capacity he will continue his 20 years association with Lear, Inc., the parent company, by advising on matters concerning the firm's export operations. Mr. Gelin has been active in the engineering export field for more than 26 years. Before becoming Lear International's first president in 1946 he operated his own export business in the electrical, electronics and machinery fields. Lear was his principal account at the time. A graduate engineer who studied in Belgium and at M.I.T., Mr. Gelin introduced Lear's products to the export market in 1936. Since then he has directed export operations, has negotiated and set up foreign distributors, established licensing agreements and introduced Lear equipment to many foreign Air Forces as well as to foreign commercial airlines and airframe manufacturers." Our very best wishes, Lazare, for your continued success in your new capacity.

Maxwell Parshall wrote to Ralph Jope on August 14. His letter, in part, had this to say: "I am sorry that I missed the opportunity to visit you in July during my visit to Tech. It is a great experience to come back to Tech and see the great changes. I was very fortunate to be able to visit a few minutes with Huntress, Ashdown, Hamilton and Warren K. Lewis. Dr. Nagey showed me his Micro Chem. Lab and Dr. McKinney showed me his Sanitary Eng. Lab. Both were most interesting. My duties keep me close to home, and it is a rare occasion when it is possible both from a time and expense standpoint to visit Tech. I hope that it will be possible to come again before too many years. If you are out in this part of the country I would enjoy visiting with you."

June, 1958, will see our 30th class reunion. It's not so far off really, and already there are stirrings and the beginnings of plans.—GEORGE I. CHATFIELD, *Secretary*, 49 Eton Road, Larchmont, N. Y. WALTER J. SMITH, *Assistant Secretary*, 15 Acorn Park, Cambridge, Mass.

1930

As of September 1, 1955, our Treasurer, Joe Harrington, left his position of assistant director of research for the United Shoe Machinery Corporation. He accepted the position as head of the Machine Development Group on the staff of Arthur D. Little, Inc. This activity involves automatic machinery for materials handling and automatic assembly, as well as compressors and process machinery. Joe certainly worked hard for the 25th Reunion and I know we wish him the best in his new job.

It's been a long while since we have heard about Elroy Webber, whose architectural success is brought to our attention through his work for a West Hartford building and real estate firm. Roy has been very active in designing houses in New Jersey, Westchester County, and the Hartford-Springfield area. He has also designed such structures as hospitals, schools, office buildings, department stores, and clinics, all with a distinctly contemporary aspect. It is Roy's contention that modern architecture is not a

revolutionary approach to building but is simply an up-to-date approach, utilizing the many advantages of new materials and equipment now available.

We have heard recently from John Sherman who still lives in Wyoming, Ohio. He is working as a chemist in the drug products division of Procter and Gamble in Cincinnati. John is married and has a daughter 16, and two sons—11 and 13. He says, "Up to the present time, there are no potential engineers in the family."

Those of you who are in the Baltimore area will be interested to know that Harold J. Conway is now connected with Aircraft Armaments, Inc., at the Cockeysville plant. He has been made production and engineering consultant to manufacturing. Harold, of course, is well known in the aviation ordnance and guided missile fields.

It is interesting to note that the members of the Class of 1930 have been interested in all kinds of ventures. The latest comes in a story about Samuel H. Evans, a co-producer of the television show "Bobo the Hobo and his Traveling Troupe." The members of this troupe are all puppets and are electronically operated. Something new has really been added, however, in that the jaw and lip movements are controlled by an electronic device invented by Sam which permits the lip and jaw movements, as one speaks, to be reproduced by the puppets.

We heard very briefly from George E. Kloote. He still lives in Grand Rapids, Mich., and is Chief Engineer of the Haselkelt Manufacturing Corporation.

This month we had a nice note from Harold J. Levinton, who is now living on Sunset Boulevard in Los Angeles. He and his wife, Irene, have two daughters—one married and the mother of two children and the other just graduated from high school. At the present time he says he is what may be termed "semi-retired," but is working just as hard as ever managing some property investments. He is still interested in keeping his engineering status in the states of California and Oregon since he may return to professional fields of endeavor.—GEORGE P. WADSWORTH, *Secretary*, Room 2-287, M.I.T., Cambridge, Mass. LOUISE HALL, *Assistant Secretary*, Box 6636, College Station, Durham, N. C. RALPH W. PETERS, *Assistant Secretary*, 249 Hollywood Avenue, Rochester 18, N. Y.

1931

June 8 marked the start of a banner weekend for 127 members of our Class who attended our 25th Reunion with their wives and children. (See photograph in Trend of Affairs.) Following a precedent started by earlier classes, reunion headquarters were at Baker House on campus in Cambridge where we stayed in the dormitories with our families. Chuck Turner, VI, our hard-working, slave-driving Reunion Chairman, planned well, and every one who attended acclaimed it the best Reunion our Class has ever had.

Spirits weren't dampened by the drizzly registration day—although a few classmates arrived later than expected.

Bob Leadbetter, XVI, who flew up from New Jersey feeling sorry for his fellow classmates who had to buck the heavy Friday afternoon traffic, had to land somewhere in the sticks because the weather had closed in at the Boston airport. Although late, he and his wife, Elizabeth, arrived safe and sound.

Friday evening, after a buffet dinner at Baker House, friendships were renewed at an informal get-acquainted dance while the small fry were entertained by colored movies. It was especially heart-warming to see so many of our classmates from distant places. Antonio de la Torre, I, was there from Puerto Rico with his wife, Carmen, and son, Ricardo, as was Herman Ferre and his son, Antonio. Texas was well represented by Norm Fitzgerald, III, his wife, Brownie, and their two sons. Juan Bolanos, I, and his wife, Julieta, came up from Costa Rica, where Juan is superintendent of operations for the Texas Petroleum Company. Gaspar Vizoso, XV, who hasn't changed a bit in the past quarter of a century, was there from Havana. Prize winner for traveling the greatest distance was Luis Pachon-Rojas, I, from Colombia, and his wife, Arlene. There were many more, and it was good to see them all.

Gordon Brown, VI, professor, and head of the Department of Electrical Engineering, arranged for Institute tours on Saturday morning. These included talks by Professor J. C. Trump'33, on the equipment and its operation in the Therapy Unit (Building 28); Professor J. F. Reintjes on Control Systems, a demonstration of the electronic controlled milling machine; and a talk and a demonstration of the towing tank by Professor A. T. Ippen.

After the tour of the Institute, the Alumni joined members of the Faculty, who were on the staff during the years we attended M.I.T., at luncheon in the M.I.T. Faculty Club in Sloan Building. President Killian gave an interesting talk during the luncheon, bringing us up to date on affairs of the Institute. In the afternoon, Professor Walter G. Whitman, head of the Department of Chemical Engineering at M.I.T. and Secretary-General of the Geneva Conference on the peacetime uses of atomic energy, spoke on "Impressions of the Geneva Conference."

After the usual trouble trying to get the group together, the official photograph was taken, and the wives, daughters, and sons left for a Pops Concert in Symphony Hall. The big dinner was attended by 122 of the Alumni of '31 Saturday night at the Hawthorne Room in the Parker House. The food was excellent, the speeches short, and everyone had a good time. After dinner, brief committee reports were submitted and class officers were elected. Your new officers are: President, Howard L. Richardson; Vice-president, Claude F. Machen; Secretary, Edwin S. Worden; and Treasurer, William H. Jacobs. Gordon A. Speedie is Assistant Secretary; John R. Swanton, Class Agent; and Edward B. Hubbard and Ralph H. Davis, Special Gifts Chairmen. Back at Baker House, we joined our families and saw the recently declassified movie on U. S. Air Defense, SAGE.

Early Sunday morning everyone boarded the special busses for Round Hill,

South Dartmouth, and the clambake. Several drivers lost their way — much to the amusement of their passengers. One lost bus contained the children, and for a while, fond parents rushed about anxiously looking for junior. After what seemed like hours, the last two busloads arrived amidst cheers and kidding. On the way out, I sat with Leo Green, IX, who is now an orthopedic surgeon. We had a very interesting conversation on the value of an engineering education to an orthopedic surgeon.

Russ Pierce, XV, was in charge of the clambake and, as usual, did himself proud. Jake Wirth's beer tasted as wonderful as ever — but fear of expanding waistlines or old age kept the per capita consumption down. Not a single complaint was heard about the food — and a number of lucky ones received seconds on lobster. Eliot Graham, XV, and his wife, "Jo," tried to play bridge with another couple but the cards went with the wind. After the feast, juniors challenged oldsters to a ball game. Howie Richardson, who umpired, was accused of favoring the youngsters. Johnny Olsen, I, still pitches a mean ball, and Dick Baltzer, X, showed he could still run bases. Those who didn't join in the game stood on the sidelines and cheered. During the game someone gave Don Grieco, XVII, a bad few minutes when they picked up his jacket containing his watch, money, and plane tickets but it was not lost, as he feared.

Al Dowden, VI-A — who was in charge of bus arrangements — entertained the occupants of one bus on the return trip, and the time passed all too quickly. (Incidentally, our apologies to Al for omitting so much of his biography from the 25th Reunion Classbook. Sometimes an editor's life is not a happy one, especially when he has to cut good material and makes an unfortunate choice. Thanks to Al for being so good natured about it.) On the same bus, Sid Miller, X-B, caused a lot of amusement when he suddenly shouted "stop" to the bus driver and made a mad dash for the door. As it turned out, he noticed we were passing the garage where he had left his car to be repaired and just wanted to pick it up. Upon returning to Baker House, there was a buffet supper, after which Ken Germeshausen, VI, and Harold Edgerton, VI'27, entertained us with moving pictures of the atomic bomb explosions and deep-sea diving — pictures well worth seeing.

Thanks to "Obie" Denison'11, we learned that Joseph Ferrucci, VII, now an M.D. practicing in radiology, has been breaking into the news lately. On Saturday, July 28, the Boston *Herald* published a letter he had written on safe driving, and on the following Monday the Worcester *Daily Telegram* published a picture of the Ferrucci clan taken at their sixth annual reunion. As this goes to press, a note from Don Severance tells of Brigadier General Robert J. Fleming's, II, nomination by the Alumni Association for the position of Alumni Member on the M.I.T. Corporation Visiting Committee.

More news next month if you will cooperate by sending us news of yourself and fellow classmates. As your Class Sec-

retaries, we'll do our best to keep you up to date, but we need your help in keeping posted. — EDWIN S. WORDEN, *Secretary*, 9 Murvon Court, Westport, Conn. GORDON A. SPEEDIE, *Assistant Secretary*, 22 Harvard Avenue, W. Medford, Mass.

1932

Here we are in the fall of the year again. Just 29 years ago most of us were on our way to Cambridge and to the Tech Freshman Camp where we began to know each other. A lot has happened to us in those 29 years, and probably about as much in the last 25 as in the first four! As a matter of fact, quite a lot has happened to our Class in the last four years since I have been Class Secretary. Even from those from whom I've heard, the statistics have been very interesting, and one of these months before Reunion time I am going to summarize the facts.

The mail didn't bring much to my desk this summer. I suppose it's because the time has passed as quickly for most as it has for me. The lack of real summer weather here has perhaps given a note of unreality to the season, but it's been a busy one for me, with plans for a new major Wyandotte expansion in the South, near Baton Rouge, La., plus the interesting transition from a privately-held company to a public company.

We have some notes of interest, however. First, our representation increased to 17 at the Alumni Day luncheon. Tom Sears, of course, Carroll and Mary Wilson, Bob Minot and his wife, John Brown, Frank Chaplin, Al Dietz, Fred Eimert, Lester Glickman, Fred Green, George Kerisher, Katherine Lyons, Bill Pearce, Harry Schwachman, Don Whiston, and Elwood Schaffer made up the group. Rolf reports that '31 had a most successful reunion, using the Baker House facilities. One of these days soon we'll be having Rolf's first detailed report on our own plans.

The Alumni Association has appointed Johnny Lawrence as Alumni Member of the M.I.T. Corporation Visiting Committee for the Department of Mechanical Engineering. Tom Rhines has been made a member of the Operating Committee of the Hamilton Standard Division of United Aircraft.

A nice letter from Berny Markstein, Jr., was received: "A little over a year ago we moved to Clifton, which, if you remember your Cin'ti at all, may mean something to you. Clifton is one of the older suburbs, not far from the University and fairly close to downtown. Family-wise, we have three children, two girls and a boy, the girls age 14 and 10, and the boy 5. That's all, we hope! Three are really quite a family. Business-wise, I am president of a small company (which I control) that is a producer of an industrial camera for the graphic arts. Frequently I am accused of this business being my avocation as my main interest financially is real estate. Have gone into this field rather heavily in the last ten years. Through the years I have managed to avoid any athletic activity more strenuous than cutting the grass with a power mower. My hobby is photography, at which I am strictly average, but have my

own darkroom and do my own developing and enlarging." Benny hopes to make the Reunion with his wife if they can work out some baby-sitting problems.

Stu Fleming has moved from Portland up to Vancouver, B. C., 933 West Pender Street, and he writes that he expects to be there from 18 to 24 months in charge of engineering work on natural gas development as well as other things in the Canadian Northwest. You will recall that Stu is with Ford, Bacon and Davis. Bob Loeb is Group Electrical Engineer with Glen Martin, living at 138 Warwick Drive, Lutherville, Md. Bob writes that most of his time has been spent visiting air bases in connection with Glen Martin's defense contracts. W. H. Radford is now head of Division 3, Communications and Components, M.I.T. Lincoln Laboratory. Glenn Poorman has been made Vice-president of Esso Standard Oil Company. A card from Bill Kaeser — partner in Kaeser and McLoed, Architect Engineer Associates, Madison, Wis. Henry T. Smith is living in Groton, Mass. He is Sanitation Officer for the Nashoba Association Board of Health, Ayer, Mass.

Halsted Warrick is Manager of the Caltex Central Laboratories in Rotterdam, The Netherlands. His address there is Caltex Pet. Maat. P.O. Box 200. These labs are currently being built and staffed and will provide technical services to the affiliated organizations of this company in 67 countries throughout the Eastern Hemisphere. Willard Brigham Whittemore, on the faculty of the Everett Senior High School in the Mathematics Department, recently received a special degree from Boston University representing a specific program of post-graduate work beyond the Master's Degree.

I have one death to report. Steve Bitoli died in July following a heart attack. Steve had been living in Natick with his wife, the former Sophio Peters. — ROBERT B. SEMPLE, *Secretary*, Box 111, Wyandotte, Mich. WILLIAM H. BARKER, *Assistant Secretary*, 45 Meredith Drive, Cranston, R. I. ROLF ELIASSEN, *Assistant Secretary*, Room 1-138, M.I.T., Cambridge 39, Mass.

1933

As the new year gets under way, your secretaries make a plea and a plug for grist for the Review Notes. We are interested in your professional and personal doings and we think the Class is. As an inducement, your Cambridge secretary offers drinks gratis (from tomato juice to your favorite spirits) at the Faculty Club to any out-of-towner who will appear on the doorstep. No box tops necessary; just come. Alternatively, take a few minutes to share your thinking with your classmates through the Review Notes.

Alumni Day came and went. The Class of '33 had a good representation, including Clare Farr, Tom Galvin, Art Hayden, Gerald Hudson, George Huff, Bill Kilbourn, Norma Koch, Waldron MacDonald, Jim Merritt, Dick Morse, Don Newhall, Lincoln Ryder and Westy Westaway.

We have several changes of assignment and address to report: Horace K. (Mac) MacKechine, VI, who has become man-

ager of Technical Design and Development, Inc., with headquarters in Newton Lower Falls on the outskirts of Boston; John Sterner is now director of Flight Test Operations at Patrick Air Force Base, Fla., as a member of the senior staff of the Ramo-Wooldridge Corporation, contractor at the Air Force Base; and Colonel Francis H. MacDuff who has been in Washington, D. C., for the last two years following a two year tour in Alaska. Mac reports that he is engaged in intelligence work and does not get in as much flying as formerly; Draveaux (Beau) Bender, IV, was appointed last spring to a new post in charge of the urban renewal program of the City of Cambridge.

We are sorry to report the death, almost a year ago, of Robert H. Baker, VI, in California. Bob had spent several years at Tech on a guided missile project and had proven himself an effective and selfless administrator. We regret also to report the death in June, of Walter Albertson, VIII, in Newport, R. I., where he was on the teaching staff at the Naval War College. Walter, too, had spent many years at M.I.T. on the teaching and research staff. The sympathy of the whole Class goes to the families of both of these classmates.

Bernard Lapidus, VII, who is a physician at the Veteran's Hospital in Columbia, S. C., reports that his son enters Georgia Tech this fall to study engineering. Our congratulations to Bernie on his election as a Diplomat of the American Board of Internal Medicine. Cal Mohr, who is a most faithful roving reporter for the Class, reports a change of home address to Batavia, Ill., not far from his former address in Aurora but with two acres of land on which to try his gardening hand. Cal reports recent conversations with Don Kern '34, who gave a good account on both Bob Dillon and Win Partridge who are in Texas City, Texas. Art Hungerford helped M.I.T. greatly last summer by advising on some television problems; Art is Executive Director of New York's educational television which is a major enterprise. Art's wife is active in directing a local dramatics group in Chappaqua, where they live, and also takes part in summer stock. They have a daughter, Gale, now eleven. And from way-off Nassau in the Bahamas comes word from Walter Skees, who has been in the Caribbean area for ten years. Walter says the latchstring is out for any classmates who get to Nassau on business or pleasure.

Our Class President, Dick Fossett, with a little gray hair but looking very healthy, spent a few days in the Boston area last summer. Dick is back in Long Beach with Procter and Gamble after several years in Texas. Dick feels that he should give up the Class presidency in view of his present location and has asked some of us to serve as a selection committee to nominate his successor. As much as we all would like to have Dick continue, he has convinced us of the wisdom of the change. Your committee is deliberating and will report to the entire Class as soon as possible. — GEORGE O. HENNING, JR., *Secretary*, 330 Belmont Avenue, Brooklyn 7, N. Y. R. M. KIMBALL, *Assistant Secretary*, Room 3-234, M.I.T., Cambridge, Mass.

1934

Our class notes lead off this year with the following message from Class President Hank Backenstoss: "Greetings from Cambridge! Our secretary has again extended the courtesy of these columns to me for this first issue of the 1956-57 Review, for which I hereby give him my thanks.

"The topic of greatest interest probably is our 1934 Compton Scholarship Fund. How do we stand at the moment? Well, it is an encouraging picture — for a start. But we still have work ahead. Last year, our total contribution through the Alumni Fund amounted to \$13,728. Of that amount, some \$385 was donated for specific other purposes, leaving \$13,343 for the Scholarship Fund. Thus, as of June 30, 1956, we have the following amount standing to our credit: through 1955 Alumni Fund, \$1,625; through 1956 Alumni Fund, \$13,343; endowment from life insurance policies purchased at graduation, \$6,323.19; total — \$21,291.19. Without question, this is a creditable showing. And we have three more years to go!

"The most encouraging aspect, though, is the way you have all pitched in on the project. We have an able and devoted group here in Cambridge carrying out the major part of the long-distance effort. Scattered about the country wherever '34 men are to be found, we have our 81 Funders who are making the local contacts, much of it face to face. It is their work which underlies our success so far. A contribution of \$13,728, compared with a 'normal' of about \$4,500 in earlier years, was not achieved by chance.

"My best wishes to you all for a successful year ahead. Should any of you have any bright thoughts about slowing down its passing, I'd be glad to hear them. And, if you get to Boston, don't fail to look me up."

Thanks to Hank for bringing us up to date on our Compton Scholarship Fund. Hope others of the Class will send news, too. — WALTER MCKAY, *Secretary*, Room 33-211, M.I.T., Cambridge, Mass.

1935

One year has passed since our 20th Reunion and it does not take a Tech man to figure we have only four years left to reach the goal of \$100,000 for our 25th Year Gift. At this writing I do not know the figures to date, but you can be sure they are nowhere near 20 per cent. As you know, the gift is to be a scholarship fund, one of the primary needs at M.I.T., as set by President Killian. In the May 7, 1956, issue of *Life*, there is an article entitled "The Shortage of Scientists and M.I.T.'s Answer" which every one in our Class should read. If you need a reason to contribute to our class gift, you will find it in this article. So read it, dig deep, and do not forget to designate your contributions "Class of 1935 Scholarship Fund."

I received a letter from Jeff Farmer (thanks, Jeff). He is now with The St. Crix Paper Company at Woodland, Maine (Box 245), which is 10 miles upriver from Calais and on the Canadian border. His family joined him from his

former home in Waterville, Maine, after school closed. How about following Jeff's example and dropping me a line? . . . Bev Dudley, editor of the Review, was General Chairman of the Radio-Electronics Meeting in Boston this spring. Lou Pachard was also on the committee, and Lou is now on the West Coast establishing a West Coast branch of The Acton Laboratories. I don't know just where he is at this time. . . . President Jack Colby is now general sales manager of Johnson Service Company, with his office at 507 East Michigan Street, Milwaukee, Wis., and resides at 14-705 West Juneau Boulevard, Elm Grove, Wis.

Dave Cobb of Hopkinton, Mass., sent me the following notes this summer; Dave has bought into the contracting firm of James M. Pafford Associates, Inc., of Falmouth, Mass., and is now living on the Cape. Jerry Golden spent the early part of the summer honeymooning in Europe with his new wife.

It is with deep regret we note the passing of Justin H. (Jud) Briefer. He was manager of industrial engineering of Lukens Steel Company in Coatsville, Pa. He died of a heart attack on June 4 of this year. — FRANCIS W. MULDOWNY, JR., *Secretary*, 1109 Boylston Street, Chestnut Hill 67, Mass.

1937

Here are a few notes that came in during the summer: W. Gardner Barker has been appointed vice-president of Thomas J. Lipton, Inc., and is now living in Greenwich, Conn. Albert Varrieur has been named a vice-president of Glenn L. Martin Company in Denver. This means that he has been made manager of the \$10,000,000 guided missiles research and development center under construction at Waterton, Colo., near Denver, where the firm is developing a missile designated as the Titan. Mr. Varrieur has supervised development of the Sea Master, world's first multi-jet attack seaplane, designed the mobile passenger ramps familiar to travelers at commercial airports, and has been project engineer on the 4-0-4 commercial airliner now on major U. S. routes of Eastern and Trans World Airlines.

Edward V. Corea of Hingham, Mass., is the Navy's new supervisor of the electrical and electronics branch at Fore River. Previously he had been electrical drafting supervisor and an electrical technician at the Navy's Bureau of Ships in Washington. Leonard Seder read a paper entitled "Quality Control in a Job Shop Operation" at the 10th annual convention of the American Society for Quality Control held in Montreal. He is at present a fellow and member of the board of directors of the American Society for Quality Control and a member of the editorial board of *Industrial Quality Control*. He has also promoted statistical quality control in other areas and has written a number of papers and books on the subject. . . . The Review got a couple of cards back. One is from David Richardson of Victor, N.Y., where he writes: "We have moved to a 70-acre farm to see if we can beat the high cost of living." Charles Blessing noted that he is Director of City Planning in Detroit.

Major General Floyd B. Wood, who

was one of the country's great aviation minds, was lost in April in the crash of a jet trainer in Baltimore. He received his master's degree in meteorology from Tech. He was scheduled to take command of the air-flight test center at Edwards A.F.B., Calif., in June. He was one of the air-arm's top weather experts and had been deputy commander of the Air Research and Development Command in Baltimore since the previous August.

Alumni Day was attended by the following: Raymond Dreselly, Josiah Heal, John Nugent, Roman Ortynsky, Curtis Powell, Leonard Seder, Robert and Mrs. Thorson, Arthur Zimmerman, and Tom Kinraide.

Start planning now for the Reunion next June, which will be held somewhere on the Cape. — WIN JOHNS, *Secretary*, 766 Hyslip Avenue, Westfield, N.J.

1938

Two of our classmates at General Electric have been in the news in the past few months. At Pittsfield, Forrest Judkins has been promoted to the position of superintendent of the assembly and test subsection of the power transformer department. At Schenectady, Thomas Willcox, formerly of Pittsfield, has been made senior equipment engineer in the G. E. manufacturing laboratory. A news item also tells us that Harold Cude has returned to Manchester, Conn., to command the 11th AAA Missile Battalion, which includes six Nike Batteries in the Hartford industrial area. "He has been stationed at Fort Monroe, Va., with the Artillery Branch of the Combined Arms Training Division, G-3 Section, of the Office of the Chief of Army Field Forces." In June, Paul DesJardins had an article "Handling Compressible Fluids in Chemical Processing" published in *Chemical Engineering*.

We are well supplied this month with cards and letters, and the balance of these notes is devoted to excerpts from them. S. H. Kalin: "I am still research technologist in the Chemical Metallurgy Division of Applied Research Laboratory U. S. Steel Corporation, but our laboratory has recently moved to its new home (multi-million dollar) in Monroeville, Pa." Henry P. Rumble: "Returned to U.S. (U.S. Naval Base, Portsmouth, N.H.) after 18 months duty as assistant Naval Attaché, U.S. Embassy, London, England." . . . Joseph N. Kotanchik: "Moved to a new home in Warwick, Va. Wife, Mary, and 2 sons, Jimmy and Joey, and yours truly in good health and greatly pleased with the new home. I am with NACA Langley Aeronautical Laboratory, now assistant to chief of structures research." . . . Chauncey F. Bell, Jr.: "Back to California after an absence of 22 years — which started with my coming east to M.I.T. Have joined The Rand Corporation's Logistics Department and will participate in research and consulting work for the Air Force in the fields of Maintenance Supply and Mobility." . . . Earle MacLeod: "I have recently become a member of the M.I.T. Educational Council, with the hope of interesting high school students to enroll at M.I.T. Was also recently elected Chairman of the Central N.Y. Section of The American Society

of Refrigerating Engineers, after serving as Treasurer for 2 years and as First Vice-Chairman last year. . . . Am now Development Manager, Room Air-Conditioner Section, of Carrier Corp.'s Unitary Equipment Division. . . . As to family, we have only the one youngster, Diana, who is 20 months old and the apple of our eyes."

Russell Coile: "I have just returned to Washington after a year and a half in Japan. I was the OEG representative on the staff of the Commander of Naval Forces in the Far East. OEG stands for Operations Evaluation Group, by the way. M.I.T. now administers three groups for military operations research. The WSEG (Weapons Systems Evaluation Group) for the Joint Chiefs of Staff, the OEG for the Chief of Naval Operations, and the ORG (Operations Research Group) for the Chief of Naval Research. I will now be the Director of Research of the ORG and hope to stay in Washington for a couple years. Our two-year-old daughter, Jennifer, speaks more Japanese than my wife, Ellen, or I." . . . Joe Pasternack: "During the past five years, I have been with the Convair Aircraft Division of General Dynamics Corporation in San Diego, California. I have been concerned with long-range planning for new aircraft and missile systems. I have recently been given, as Chief of Systems Analysis, the responsibility for the overall systems aspects of all new products undertaken by the San Diego Division of Convair." . . . Archer Thompson: "No. 1 son David, 17, graduating June 15 from St. Mark's — entering Harvard this fall. No. 2 son Brian, 15, entering St. Mark's in the fall. Sally, 13, in 8th grade at Jr. Hi."

Ira Lohman: "The May issue of *The Technology Review* reached me yesterday and in opening it I found that every other page was blank. Since I am an avid reader of the Review this was a bitter disappointment. My work here at IBM's Airborne Computer Laboratory continues to keep me very busy. We have recently let the bids for a new plant and laboratory comprising approximately 480,000 sq. ft. of engineering, manufacturing and administrative floor space which will be constructed at Oswego, N.Y., approximately 12 miles west of Endicott. In the past we have suffered from a shortage of both space and engineers. The new plant should correct the first of these two shortages. I think we are on the way to alleviating the second one but much remains to be done. If you see any unattached engineers please steer them our way."

"You may have noticed in recent newspaper articles that our Bombing Navigation System known as the MA-2 during its development stage and recently redesignated AN/ASB-4 will be installed in SAC's B-52 aircraft. This is the project I have been working on for the past five years and we are both proud and happy to see it go into production." — DAVID E. ACKER, *Secretary*, Arthur D. Little, Inc., 30 Memorial Drive, Cambridge, Mass.

1939

Since last writing, a few brothers have made some news. Bill Pulver has sold his Pulver Gas and Oil Company to Tidewater Oil Company, and I suppose he has

been merged right up into a terrible tax situation. Well, the situation has its bright side — this acquisition may enable Tidewater to increase its gross beyond last year's 478 million.

Manning Morrill, who attended our 15th reunion and whom I met about two weeks later by coincidence at Chicago airport, writes from 2435 Grand Avenue, S.E., Cedar Rapids, Iowa, where, in addition to being the father of four, he is General Manager of the Western Division of Cryovac Company, a Division of W. R. Grace. Manning is responsible for production and sales and mentioned meeting Bob Saunders in Washington at a train depot, where Bob was waiting for a connection to a Chicago furniture or carpet convention. Manning writes: "I occasionally see Brownie Parker and Oz Stewart on visits to Company headquarters, which are still located at Dewey and Almy in Cambridge."

Bob Fife, who is now an attorney, and who lives about a block and a half from our house, recently bought a new station wagon, packed his ever-livin' wife and four youngsters aboard, and made his pilgrimage to Boston, Belmont, New Hampshire, and in-between points.

Al Laker stopped by our house last Sunday afternoon, and as we inspected his brand-new light blue convertible and discussed its "pick-up" (Al is still single), we barbecued some weenies and played ball with my boy, Eddie, who by the way is ten. Time flies. . . . Well, back to classmates. Last spring, I visited Dave Lindberg, who is an engineer with the 'phone company at Stockton, Calif. Dave was plenty busy just before then, restoring service when floods in northern California caused extensive damages. For classmates who drop by to see Dave, I can say they will enjoy meeting his two beautiful red-headed twin daughters and his charming wife who makes the world's finest cheese-cake. (Sid Silber please take notice.)

A little news from M.I.T. friends in other classes. Before June, I saw Charles S. Godfrey '40, who is a group leader at Livermore Nuclear Energy Laboratories. Bob was just about to take off to participate in the summer's nuclear tests "somewhere in the Pacific." About then, I also visited Jack Ingersoll '46, near Palo Alto. Jack is a super-salesman who sells companies like General Electric his electronic gear because he convinces them it's better for them than equipment of their own manufacture. Jack and Jerry have just bought a new-old house on a hill overlooking a beautiful valley, have started remodeling, have placed in operation a terrific hi-fi and a not-so-good ping-pong table (at which Jack gave me a decisive shellacking).

The Jim Cullisons '41, live in nearby Palos Verdes, and Barbara is about to pack four of the five youngsters in the family chariot and drive the eldest, young Jim, to Northwestern at Evanston, where he'll start pre-medical training. Brother, when our youngsters approach college age, it's time to say *tempus est fugit*. Wiley Corl '39, 1108 Stony Lane, Gladwynne, Pa., just wrote to say he has started in business for himself as a manufacturer's agent. Didn't say what products, but I assume his line is electrical. If

you'll send your orders to Uncle Wiley, I'm sure he'll be glad to give special discounts to members of the Class of 1939.

Bob Casselman '39, has recovered from his surgery, at least enough to make it across the country, and 'phoned me last week from Hollywood. Said he was out here on business again, but you know how it is with these traveling men. Anyway, it was nice to visit with Bob on the 'phone. And it's good fun to drop in on classmates and get their letters every once in a while. Take a lead from this, you readers who enjoy the news, and sit down right now, that is right now, and in pencil or with post office pen dipped in your own blood if need be, let's have a note for the next Review. — HAL SEYKOTA, Assistant Secretary, 416 Calle Mayor, Redondo Beach, Calif.

1940

After the summer lull, there is quite a bit in the way of activities to report. Dave Sunstein, who formed Sunstein Engineering Company about a year ago, after having worked for many years with the Philco Corporation, has now been joined by several fellow Alumni, and the name of the company has been changed to General Atronics Corporation. In addition to Dave, the members of the company include George Laurent '39, Bob Roop, who did graduate work at the M.I.T. Acoustics Laboratory, and Bernard Steinberg '49. General Atronics is located at 125 City Line Avenue, Bala-Cynwyd, Pa. If any classmates have problems in the field of electronics and acoustics, or need or desire consultants in this field, I would suggest that you get in touch with Dave. In addition to consultation work, General Atronics has set up a laboratory and is carrying out experimental investigations and developments on projects of their own, as well as projects primarily of interest to others. Dave's organization has been chosen as a consultant by Secretary of Defense, Charles E. Wilson, and I had the pleasure of having dinner and speaking with Dave for a short time one evening several months ago.

I had a letter from Beano during the summer recess. The detergent business seems to be flourishing, although Beano has not indicated that he is still keeping up his extra-curricular professional wrestling activities. Dick Speas, who was an Aviation Consultant, has been joined by John Casey at LaGuardia Airport. Previously, John was assistant vice-president, maintenance at American Air Lines, and during World War II had served in the Air Force in both flight and administrative posts. Louis Michelson is running General Electric's rocket engine business. His exact title is unknown to your Secretary, but I have been advised that it is a terrifically big job. Dick Braunlich is still with American Viscose as a Research Group Leader. Of interest to the movie-goers, Dick's wife is the sister of Eva Marie Saint. John Vanderpool is teaching the Air Force ROTC at Tech.

George Lof has been in the news for his work on harnessing the energy from the sun's rays. George has developed a gadget for cooking hot dogs and other food by such a method. The device has been

termed an "Umbroiler" as it resembles an aluminum umbrella when opened. I saw the Umbroiler in operation this summer when George had left it for a few days with Pope Lawrence '37, my next-door neighbor. Unfortunately, I was out when George visited Pope and didn't have a chance to see him. The Umbroiler really works well.

Ed Hahn, who has been chief chemist in the Foam Division of U.S. Rubber at the Alice Mill Plant in Woonsocket, R.I., has recently assumed responsibility for product control and development of foam rubber and fabric shoes. The Class of '40 is getting into the political arena this fall. Dave Johnstone of Stonington, Conn., is a candidate for the Republican nomination in the State Senate in the 20th District. Due to delays in preparing this column, we will not be able to inform you in advance whether Dave has been successful in his efforts. At present, he is a consultant in food engineering and has an interest in an automobile agency. He has also been active in civic affairs as president of the Stonington Community Center, and as a leader in the more recent cancer campaigns in the town.

Paul Baral is now located in Los Angeles, Calif., and is working in the Papermate Manufacturing Company, Research and Development Division. Clint Powell, who is now of Chevy Chase, Md., has recently been appointed special assistant for Radiological Health, Division of Special Health Services. He is now in charge of the medical aspects of radiological health for the Public Health Service. The engineering aspects of radiological health are the responsibility of Jim Terrill '41. Norm Laschever has left the Government service after 14½ years at Wright-Patterson Air Force Base, Dayton, Ohio, and is now a senior engineer at the Laboratory for Electronics in Boston. Norm is married, has four children, and is trying to get used to the Boston spring snow storms.

Jim Brewster III has joined Sylvania Electric Products, Inc. as Director of Customer Relations for the Electronics System Division. Kingsbury Jackson, who is a major in the Chemical Corps of the Army, is now Comptroller of the New York Chemical Procurement District, central procurement office for the entire Chemical Corps. Kingsbury married in 1950, and has two girls. He recently bought a house in Garrison, N.Y., opposite West Point, and would be glad to hear from any classmates in that vicinity. Captain Claude Hawk, U.S.N. is now in command of the Naval Boiler and Turbine Laboratory at the U.S. Naval Base in Philadelphia, Pa. Claude assumed command of the laboratory after completing the Advanced Management Course at the Harvard Business School in June of last year. He would welcome visits from any graduates interested in full scale testing of combatant ship boilers, turbines, gears, and other main propulsion equipment, and in research and development work incident thereto. For those classmates who are interested in this field, Claude advises that they are looking around for qualified engineers to work at the laboratory.

While this was an off-year for attendance at Alumni Day, still '40 was represented by Bob Bittenbender, John Dan-

forth, Mr. and Mrs. J. B. Feldman, Russ Haden, Mrs. Lillian Lee, Mrs. James Flannagan, John Piotti, Jr., Dick and Mrs. Robertson, Gordon and Mrs. Seavey, Bob and Mrs. Stanley, Phil and Mrs. Stoddard, Arnold and Mrs. Wight, Leo Pach, and Russ and Mrs. Werby. — ALVIN GUTTAG, Secretary, Cushman, Darby and Cushman, American Security Building, Washington 5, D.C. DR. SAMUEL A. GOLDBLITH, Assistant Secretary, Department of Food Technology, M.I.T., Cambridge 39, Mass. MARSHALL D. MCCUEN, Assistant Secretary, 4968 West 14th Street, Indianapolis, Ind.

1941

Eighty-one men, accompanied by sixty-two wives and three dates, descended on the Shore Club of the Mayflower Hotel at Manomet Point, Plymouth, Mass., for the long-awaited 15th Reunion of the Class of 1941. Activities began early Friday morning, June 8, with the arrival of the committee, plus some other eager beavers, and all during the day arriving "Reunioners" were greeted by the warm hello and hearty handshake of Reception Committee Alice and Ed Baupre. A cocktail hour from 5:30 to 7:00 provided a fine meeting point for old friends, and at 7:00, dinner was served in the hotel dining room. (The Secretary, having faithfully promised to be on hand early, became involved in a Class I flap at work, and was lucky to arrive by 8:00.) After dinner, the group gathered in the Shore Club (a facility separate from the main hotel, and located directly on the beach) for a delightful program of hi-fi music provided by Professor Klaus Liepmann, Professor of Music in the Institute's Department of Humanities. Professor Liepmann introduced the program with an entertaining discussion on the subject of music and music appreciation, all of which was very well received. After the conclusion of his program, the group separated into smaller sessions for reminiscing, and swapping stories of the children's exploits. (Leading the baby derby: Bobbie and Howie Samuels, with six.) Our group was quartered mainly in the Shore Club, many of whose rooms looked directly onto the beach, with some people in villas just to the rear of the Shore Club and about fifty yards from the beach.

Unfortunately, Saturday arrived gray, foggy, and wet, much to the dismay of the sub-committee on weather, and to the chagrin of the Californians and Floridians, several of whom hastened to Plymouth to stock up on winter clothes. As a result, our usage of the beautiful private beach was definitely limited, although some of the more intrepid souls, determined to get the mileage out of their bathing suits, made use of the pool adjacent to the Shore Club. Bridge bugs, on the other hand, like Shirley and I, had a field day, with practically a whole day of peaceful, uninterrupted bridge. Part of our rain insurance, in the form of an M.I.T. movie on SAGE, the computer system of continental air defense, paid off handsomely, being run in the morning, to the interest of all who saw it. Our cook-out, scheduled for noon on the beach, had to be held in-

doors, but the lobsters were just as good (and less sandy), to say nothing of the other sea food, plus chicken, corn on the cob, and all the trimmings. During Saturday afternoon, some of the athletically inclined took part in volleyball, horse-shoes, and other sporting events, all capably handled by Johnny Sexton.

Late in the afternoon, the menfolk gathered for the business meeting, with the main item being the election of the following slate of officers to serve for the coming five years: President, Ed Marden; Vice presidents, Carl Mueller (New York area), Joe Myers (Chicagoland), and Frank Storm (Texas and related territories); Secretary-Treasurer, Ivor Collins; and Assistant Secretary, Hank Avery. We incoming officers are here to serve you, the members of the Class.

Please get in touch with any one of us any time you have any ideas or suggestions on how Class affairs should be handled — and, *don't* forget to write the Secretary when you have a spare moment; it's amazing how many and varied are the interests of the Class. At this point, I would like to add a note of thanks, both personal and on behalf of the Class, to retiring Prexy Will Mott for a job well done.

To pick up the Reunion story again: after the business meeting, we reconvened in the Night Club (a spacious area in the main hotel, with picture windows overlooking the ocean) for the afternoon cocktail hour, with music furnished, as on Friday, by Johnny Sexton, who had carefully tape-recorded a great number of his records of the 1937-41 era, and then played the tape over the public-address system. At 7:00, the banquet was served and heartily enjoyed by all. After the banquet, master of ceremonies Ted Sherburne sparked a lively program concocted by himself, Howie Morrison, and Irv Stein. The first item was a choral group (Kreske, Beaupre, and Collins), featuring an unrehearsed and unwitting performance of an original tune by Ted. A diaper-changing contest pitted Howie Samuels against the Most Eligible Bachelor, Ed Marden, with Ed winning in a breeze. Several prizes were awarded: to Bill Ahrendt, for pristine elegance; to Leonora Surosky, for being first into the pool; and to Ray O'Connell, the door prize (a door). After Ted's Revue was completed, we enjoyed an evening of dancing. At the end of the evening, we ran some movies of the 10th reunion, as taken by Howie Samuels and Teddy Walkowicz. After that, the group broke up into small parties in various peoples' rooms, some of which went on until dawn (or so it was reported; I didn't cover them personally). Sunday arrived like Saturday: gray, foggy, and wet, although by noon it had improved to plain overcast. Some went to church, some engaged in the sporting events, and some stayed in and talked over old times. After Sunday dinner, the majority took their leave, all agreeing that it had been a grand weekend, and promising to meet at the Twentieth. This sketchy report of how just one person saw the Reunion only scratches the surface; you have to be present to appreciate the good fun and fellowship, the renewing of old acquaintances *and* the forming of new

ones. To Ed Marden and his hard-working committee, we all owe a sincere vote of appreciation for their efforts. Serving with Ed, through a series of preliminary meetings starting almost a year before the Reunion, were Johan Andersen, Ed Beaupre, Dave Howard, Walt Kreske, Mitchell Marcus, John Sexton, Irv Stein, Howie Morrison, and Reid Weedon.

Listed here are those present, and their present positions where known (lack of a stated position does *not* mean that the man is out of a job, but merely that my informal Gallup Poll didn't get to him): Maisie and Zach Abuza, Dayton, Ohio; Bud Ackerson, Braintree, Mass.; Rusty and Bill Ahrendt, West Hyattsville, Md.; President, Ahrendt Instrument Company; Lois and Bob Alfred, Brookline, Mass.; Sis and Johan Andersen, Hopkinton, Mass.; Mary Ruth and Hank Avery, Pittsburgh, Pa.; Pittsburgh Coke and Chemical Company; Kitty and Bill Babcock, Sayreville, N.J.; Bob Bailey, College Park, Ga.; Meteorologist, Eastern Air Lines; Alice and Ed Beaupre, Nashua, N.H.; Executive Vice-president, L. E. Mason Company, Boston; Clare and Al Bensusan, Cranston, R.I.; Lindsley and Bob Blake, Falls Church, Va.; Pat and Roger Blum, Scarsdale, N.Y.; Ginny and Joe Bowman, Denver, Colo.; Colorado Coal and Iron Company; Catherine and John Brannan, Rocky River, Ohio; Shirley and Ivor Collins, Wakefield, Mass.; General Electric Company; Wilson Compton, Old Greenwich, Conn.; Helen and Syd Cramer, Douglaston, N.Y.; Amelio and Mrs. D'Arcangelo, Belmont, Mass.; Professor of Naval Architecture, M.I.T.; Carol and Bob Demartini, Rensselaer, N.Y.; Mike Driscoll, Brookline, Mass.; Doris and Ted Ferris, Longmeadow, Mass.; Shawinigan Plastics; Barbara and Rog Finch, Poestenkill, N.Y.; Rensselaer Polytechnic Institute; Arthur Fletcher, second in command of training, Craig Air Force Base, Ala.; Mary Lou and Sam Fry, Seattle, Wash.; Boeing; Marge and Herman Gabel, Snyder, N.Y.; Carl and Mrs. Goodwin, Bay Village, Ohio; Alice and Les Gott, North Haven, Conn.; Peggy and Ray Harper, New York, N.Y.; Photography; Dorothy and Luke Hayden, Dewitt, N.Y.; Bank; Evie and Bill Hooper, Brookfield, Conn.; Jack Horner, Whittier, Calif.; North American Aviation; Phyllis and Ralph Hunt, Ft. Walton Beach, Fla.; Major, U.S.A.F., Eglin Field; Steve James, Evanston, Ill.; Sales Engineer, Loewy Hydropress Corporation; Roz and Walt Keith, Akron, Ohio; Nancy and Charlie King, Manchester, Conn.; United Aircraft Corporation; Jean and Warner Knight, Arcadia, Calif.; Pharmaceuticals; Joan and Don Knott, White Plains, N.Y.; Pfizer Chemicals; Walt Kreske, Boston, Mass.; Patent Attorney; Elaine and Bill Lifson, Union, N.J.; Rita and Jack Lyons, Marblehead, Mass.; A. C. Lawrence Leather; Marjorie and Mitch Marcus, Waban, Mass.; Dion and John Macleod, Schenectady, N.Y.; Technical Recruiter, General Electric Company; Ed Marden, Brookline, Mass.; President, E. R. Marden Corporation; Nancy and Sam McCauley, Upper Darby, Pa.; Atlantic Refining Company; Bob and Mrs. Meier, Hazel Park, Mich.; Meier Brass and Aluminum Company; Margaret and Earl Meyers, Brook-

line, Mass.; Ann and Kirk Miller, Baltimore, Md.; Investment Counselor; Howie Morrison, Winchester, Mass.; Trans-Sonics, Inc.; Charlotte and Will Mott, Springdale, Conn.; Nuclear Development Corporation of America; Sue and Carl Mueller, Ridgewood, N.J.; Vice-president, Bankers Trust Company, New York; John Murdock, Lansdowne, Pa.; Perlite Corporation; Janet and Joe Myers, Hinsdale, Ill.; George Newton, Wellesley, Mass.; Professor of Electrical Engineering, M.I.T.; Carolyn and Ray O'Connell, Litchfield, Conn.; Sales Manager, Torrington Company; Alfred Pedraza, Havana, Cuba; Lloyd Perper, Tucson, Ariz.; Barbara and Harvey Pofcher, Auburndale, Mass.; Marianne and John Potter, Katonah, N.Y.; Kay and John Renner, Arlington, Va.; Mary Lou and Roger Robertson, Ocean City, N.J.; Manager, Instrumentation Engineering, Special Defense Projects Department, General Electric Company; Bobbie and Howie Samuels, Canandaigua, N.Y.; Charlie Sauer, Newton, Mass.; Arthur D. Little Company; Louise and Max Schweinsaut, North Attleboro, Mass.; Jewelry; Marge and John Sexton, Winchester, Mass.; Vice-president, Bemis Associates, Inc.; Adele and Dave Shapiro, Laurelton, N.Y.; Ted Sherburne, Boston, Mass.; Television Station WGBH; Eleanor and Bob Smith, Dillsburg, Pa.; Louise and Ken Spaulding, Plainfield, N.J.; Irv Stein, Cambridge, Mass.; Marge and Carl Stewart, Camp Hill, Pa.; Pennsylvania Railroad; Frank Storm, Amarillo, Texas; Bank; Leonora and Alan Surosky, White Plains, N.Y.; Nuclear Development Corporation of America; Jim Thornton, Princeton, N.J.; Helen and Stan Tirrell, Buffalo, N.Y.; Mildred and Walt Turansky, West Hartford, Conn.; Hartford-General Contractors; Phyllis and George Vineyard, East Patchogue, N.Y.; Lois and Ted Walkowicz, New York, N.Y.; Peggy and John Waller, Barrington, R.I.; Barbara and Reid Weedon, Winchester, Mass.; Arthur D. Little Company; Shirley and Ed Weinberger, Pittsburgh, Pa.; Dorothy and Bob Williams, Towson, Md.; and, last but not least, Miss Dorothea Wormser of Cambridge, Mass., who became Mrs. Irving Stein on June 30. Congratulations and best wishes! It's getting pretty seldom we have the pleasure of announcing a marriage in this column.

Unable to attend the Reunion, among many, was Herb Moody, grounded with chicken pox; Dirk Van Dongen, in Manila; John Stern, buying jet transports for United Air Lines; and Don Scarff "... have wonderful time and save space at 25th for California delegation." We'll be glad to, Don. See that you come, now! Also unable to attend because of the passing of his father, C. A. Corney '14, was Chet Corney. Our sincere sympathies to Chet in his loss. — IVOR W. COLLINS, *Secretary*, 28 Sherman Road, Wakefield, Mass. HENRY AVERY, *Assistant Secretary*, Pittsburgh Coke and Chemical Company, Grant Building, Pittsburgh 19, Pa.

1942

The first item of information each month for the next eight months will naturally be the latest report of Fifteenth

Reunion plans. The committee has already been assured of a goodly attendance in addition to themselves and wives, namely: Munroe Brown (no spouse as of the present), Al Dengler, Stan Golembe, Paul Hotte, Harvey Kram, Cart Laffoon, Marty Levene, Dick Meyer, Dave Nicholson, John Noyes, Milt Platt, John Schmidt, Jack Sheetz, Frank Staszsky, and Chairman George Schwartz. An Hotel of Distinction is the appellation of the Chatham Bars Inn, at the elbow of Cape Cod. Not only are the color pictures and brochures beautiful, but Stan Golembe and John Schmidt report that Mr. McMullen is a host par excellence. We have been assured by classes that have held reunions there in recent years that they had grand and glorious weekends even when the weather was a bit on the chilly side.

By way of professional news, we received a letter from George Kennison of The Torrington Company just after the July Review went to press. *Machine Design* magazine recently published a paper of George's on "Cycloidal Motion Cams." On the home front, the Kennisons now have three small fry; the latest is Peter Scott, born last March 19. Chris Peek, of Sylvania Electric Products, has appeared on the programs of several national engineering society conventions to talk on "Developments in Concentrated Source Lamps." Ronald Shainin gave a talk in Buffalo, not too long ago, entitled "Flight Report, X-1A." Bell Aircraft's rocket-powered airplane. The news item in the Buffalo *Courier Express* not only refers to previous reports of his African safari and intriguing lion hunting movies, but also records that he was born in Shanghai, served in the Air Force, where he spent a lot of time interrogating German scientists about their wartime rocket developments, flew 148 Atlantic crossings for Pan American Airways between 1946 and 1948, and now resides in Eggertsville with his 60-inch boa constrictor, Crusher.

A story in the New York *Herald Tribune* tells of the recent marriage of Alice Frances Brown to Peter J. Westervelt. In addition to the S.B. he took with us, Pete stayed on at Tech for an S.M. and doctorate in Physics. He is now an Assistant Professor in the Physics Department of Brown University. Mrs. Westervelt is a graduate of the Lincoln School, Providence, and Wells College.

At Alumni Day last June, we learned that Jack Quinn is a test pilot for Northrop Aviation. Pete Hellige is in Saco, Maine, where he has a wood-turning business that makes, among its many products, rolls for paper-making operations. John L. Collins came down from Corning, N. Y., where he is a machine designer for the Corning Glass Works. A note from Bill Foley of Glastonbury, Conn., records that he is a design project engineer for Pratt and Whitney Aircraft. Previous to July 1954, he was supervisor of Power Plant Installation for Chance Vought Aircraft. W. F. Hagestad is a vice-president of the Canal Barge Company of New Orleans. Earlier, he was general manager of the Marine Division of the Pure Oil Company in Chicago. Bob Insaude is with the General Electric Company in Pittsfield, Mass., as a facilities engineer in the Chemical and Metals Division. He has

two daughters, five and eight years old, a fine wife, and 50 pounds more weight than when we left Tech a few years ago. William E. Vannah writes that he is editor of *Control Engineering* magazine, published by McGraw-Hill in New York. He is also secretary of the Instruments and Regulators Division of the A.S.M.E. The Vannahs have two boys and two girls.

Charlie Speas was in town a short while back for a pleasant lunch and chat. We readily learned that Charlie and Betty now have three girls — Katherine was born on August 27, 1955. With a little more persuasion we got him to talk business and tell us that he is assistant technical director of the Hedwin Corporation of Baltimore, fabricators of ingenious plastic containers for acids and many other hard-to-handle liquids. Your Secretary recently published an article in the UNESCO Bulletin for Libraries about the Photon Machine and Photocomposition of the multiline writing forms of the Middle and Far East. This is one of those rare times when there is nothing unusual about New England weather. The sun has been shining quite a bit of late, and the temperature has been delightful. We're off for a fall vacation. — LOU ROSENBLUM, Secretary, Photon, Inc., 58 Charles Street, Cambridge 41, Mass.

1943

Our first combined reunion with the Classes of 1942, 1944, and 1945, was held last June on the weekend preceding Alumni Day. Classmates who attended the Saturday night dinner dance at the Faculty Club were Bill and Marty Selke, Howard and Dorothy Bollinger, Mr. and Mrs. Ira G. Cruckshank, Hugh Pastoriza, Jr., Frank and Louise Wadsworth, Gene and Shirley Eisenberg, Sid and Lil Siegel, Herb and Louise Shivek, Bill Laird, Leo and Helen Fitzpatrick, Bob and Pat Anderson, Jane and Jim Hoey, Jackie and Dick Feingold, and Fred Kaneb, with \$3.00 in Canadian money. Most of the above attended the clambake in Ipswich on the following day, which occasion was graced by the arrival of Gus Calleja and Bert Picot and their lovely wives, and Bill Maxwell and his family. Further arrivals at the Monday luncheon were Dave Falk, Sid Hall, Miran Manning, Kemp Maples, Morris Rosenthal, Ken Spencer, Marty Winter, Virgilio Barco, and Paul Travers.

Bill Maxwell is district engineer for Marlow Pumps, a division of Bell and Gossett Company. Paul Travers is director of engineering for the newly created Mack Electronics, of Boston, a division of Mack Trucks, Inc. Robert E. Hewes was appointed Registrar of M.I.T. early this summer. He succeeded Joseph C. MacKinnon. Charles J. Lawson, Jr., has been appointed general manager of the International Business Machines Corporation's manufacturing plant, which will be constructed at Rochester, Minn. Charlie was formerly assistant general manager of I.B.M.'s Poughkeepsie, N.Y., plant, and was a member of the group of executives which selected Rochester as the site of the company's seventh manufacturing facility. In 1954, he became manager of manufacturing planning in New York, and

later that year was named administrative assistant in the office of the vice-president in charge of manufacturing, where he served until he was appointed assistant general manager at Poughkeepsie.

Bill Kates addressed a meeting of the American Society for Metals in San Francisco last April. His topic was "The Applications and Uses of Metals in Electronics." Bill is manager of commercial development for Sylvania Electric Products, Inc., atomic energy division in Bay-side, N.Y. Larry Stewart is chief of Proposals and Pricing at the Rocketdyne Division of North American Aviation, Inc. in Canoga Park, Calif. The company develops and manufactures large rocket engines for application to guided missiles. He recently built a new home overlooking the Pacific Ocean, which he claims has the best view this side of Rio. Larry and his wife adopted a daughter, Suzanne, last December. George White is a group engineer at the Lockheed Missile Systems Division in Van Nuys, Calif., where he has the responsibility for the design of instrumentation equipment for a group of missiles. D. Read Stevens, Jr., writes that he gave up the coal mining business and went back to wire-making in Niles, Mich., with The National-Standard Company. To date, Read has bought four homes and sold three, which probably gives him the title of "Champion Conveyancer" of the Class.

Joe Mestier of Allis-Chalmers Manufacturing Company became sales manager of their Detroit office last spring, moving from Syracuse, N.Y. Commander Paul Schultz, U.S.N., transferred last January from duty as shipbuilding and repair superintendent, Portsmouth, N.H., to assignment as deputy director, Development Division of Field Command Armed Forces Special Weapons Project at Sandia Base, Albuquerque, N.M. Ward Haas has been appointed as an Alumni Member on the M.I.T. Corporation Visiting Committee for the Department of Biology. Sherman and Paula Sackheim became the proud parents of a boy, Matthew Neil, born August 9, 1956, in New York, N.Y. Greg Azarian has been appointed sales manager of Colt's Plastics Company, Inc., in his home town of Hartford, Conn. From Mohawk, N.Y., came glad tidings to the effect that Mr. and Mrs. Fred Dickson have recovered from the arrival of an active baby boy, Stewart Price, born on July 16, 1956. John X. Foley has moved to Egypt — Egypt, Mass., that is, and Loring Hosley, Jr., is now located in Haddonfield, N.J. — RICHARD M. FEINGOLD, Secretary, 49 Pearl Street, Hartford 3, Conn.

1945

A happy autumn to you all; we trust your summers were well spent between gardening, boating, and golf. Oh yes, work too, of course!

On Friday, May 25, an impromptu gathering (actually it took much planning on Dave Trageser's part) was held at the Faculty Club in Cambridge. Those attending were Pete and Lou Hickey, Bill and Betty McKay, George and Jan McKewen, Bill and Elaine Shuman, Chick and Helen-Marie Street, and Dave and

Mary Trageser. We know you will be shocked to learn that our illustrious classmates spent more time in the bar than the dining room; it was necessary to reopen the kitchen in order that food might eventually be served!

The Streets moved into their new home, designed and built by Chick himself, in early May. The McKewens, on the other hand, bought a house in Lexington, since George's employer, Tracerlab, is just completing a new office and factory on Route 128. Pete Hickey divides his time between his office in Boston's leather district and the manufacturing plants in Camden, N.J. If any of you should be in the Camden area, please look Pete up. The Hickeys held a reunion with Tom Stephenson at the Hotel Hersey in Pennsylvania. Lou reports that aside from caring for the four little Hickeys she has "nothing much to do." Bill Shuman has certainly become a shrewd New Englander — he doesn't travel in the winter, he just skis!

Henri Audet, Jay and Mrs. Forrester, Bill McKay, Bill Meade, Warren Miller, Dave Trageser, Dick Winkler, and Max Ruehrmund attended Class Day activities last June. No particular report as to activities of this group; you will note that the same few continue to return year after year without too many new faces appearing. Not everyone lives in the Boston area, for Maxie lives in White Plains, N.Y., while Warren Miller hails from Buffalo. While on the subject of reunions, possibly we should indicate that there are still available colored group snapshots of our 10th Reunion held in Lennox over a year ago. If you desire a copy, so indicate when you forward your class dues to Prexy Dave Trageser. Checks should be made payable to M.I.T. Class of 1945, in denominations of two, five, or ten dollars.

Ed Stoltz has been transferred by Johns-Manville from Wheeling, W. Va., to Pittsburgh, where he is in charge of all Transite pipe sales in the area. Another newcomer to our ever-growing Pittsburgh contingent is Pete "Voo Doo" Schwab, who lives at 64 Northway Drive. Tom Markey, with Merck in St. Louis, is anxious to make contact with 45ers in the area; why don't you fellows there give him a call? John Gaffney of Endicott, N.Y., reports that he was married on October 29, 1955. Oliver Selfridge is now a group leader at Lincoln Labs, and further reports that he is "properly suburbanized and bechildrened (two)." We were glad to learn that Clarence "Red" Howell is still alive and kicking in the Pacific Northwest. Frank and Tillie Gallagher are proud parents of a third child and third daughter born early in the summer. Frank is still with his father in the Gallagher Construction Company in Cambridge. Gerry Quinnan is not only holding down a position with Boit, Dalton and Church, industrial insurance brokers, in Boston, but he is also a part owner of the Lincoln-Mercury Agency in Belmont (your class secretary will still beat you in price and insurance service, Jerry!). We feel Jerry's five offspring will offer stiff competition to the Harty Kirchers at our 15th Reunion.

Dr. Eugene S. Rubin of Waban, Mass., has accepted an invitation from Belgium to present a lecture on jet propulsion be-

fore a group of national scientists in October. Gene recently spent two years in England as a Fulbright Scholar at Oxford University where he received his Ph.D. He is married to the former Arlene Davidson of Brookline, and they have an eight-month-old son, Philip Jeffrey. In early May, Curt Beck of Pampa, Texas, forwarded a most enlightening article which appeared in the local paper. The basic purpose of the article was to outline the fine work Curt had done in local Scouting in the area; at present bachelor Curt is a local Cub Master. Curt is administrative assistant to the Director of Research and Development for Cabot Carbon Company, chairman of the Panhandle Plains Section of the American Chemical Society, as well as secretary of the Panhandle Section of the American Institute of Chemical Engineers. What a busy bachelor, who in addition, has time to pursue his photography hobby! As you may recall, Curt stands some six feet eight inches; because of his height he is a member of the Amarillo Tip Toppers Club wherein all male members are in excess of 6 feet 2 inches and women over 5 feet 10 inches.

Last week we learned that your secretary is to be vice-chairman of this year's Alumni Fund drive in the Stamford, Conn., area. I hope we will have an opportunity to call upon Jim Levitan, whom we saw at a distance recently at the Stamford station, and also Jim Brayton, a recent newcomer to Fairfield County. Jim completed his construction project at Electric Boat in Groton last February, at which time he was transferred to Fuller Construction's office as a purchasing agent in New York City. The Braytons have just completed a new home on Blueberry Hill Road in Weston, Conn.

In mid-July, we received a most enlightening letter from Chuck Buik up in Rochester. Chuck indicates that he has never touched a bugle since leaving Tech, for he has had the feeling that bugling was not an accepted way to win friends or favorably influence people. Chuck and Jeff's (Course V-'45) children must have all been born while Chuck was still in the Navy for the kids' birth places read like a travelog. Keith was born at sea, daughter Robin in Japan, Lee in Washington, D.C., and Todd in The Netherlands. Chuck further reports that his family would throw off our recent class statistics, for he has lost 15 pounds since graduation, while Jeff has gained only two. Thanks for your letter, Chuck, and look us up when you are in New York next trip.

Unless we receive some news items from you guys and gals, it will be necessary to devote next month's entire script to your class officers' plans for increased Alumni activities. See you then. — CLINTON H. SPRINGER, Secretary, Firemen's Mutual Insurance Company, 420 Lexington Avenue, New York 17, N. Y.

1946

On June 8, the clan commenced to gather at the Hotel Curtis in Lenox, Mass., for what turned out to be a very successful reunion. About half the 102 turnout arrived on Friday night and commenced to warm the place up. The rest

arrived Saturday morning. The weather, which was beautiful all week long, turned foul for the weekend, but it didn't dampen the spirits. The hotel had blossomed out with a heated outdoor swimming pool, and despite the cold drizzle it was full of swimmers most of the time. The class softball game was held Saturday afternoon. With twenty fielders poised for a catch you wouldn't believe it unless you saw it. Everyone at bat got "hits." Some of us haven't lost the touch, though. The Craig to Brown, short to first, combination still had the professional touch. Saturday evening a class meeting was held. It was voted to combine the various monthly classes of 1946 into one Class of 1946. Gone are the designations 2-46 and 6-46. Class officers were elected as follows: President, Herbert J. Hansell; Vice-president, Donald A. Hurter; Treasurer, Edwin H. Tebbetts; and Secretary, John A. Maynard. A class executive council was also elected, composed of the above named officers, and the following additional classmates: David G. Black, James Craig, Stuart Edgerly, Ted P. Heuchling, and George A. Ley.

After the solemnities, a rousing cocktail party was followed by a banquet, toastmastered by George "Amos" Ley. Professor William "Wild Bill" Greene was the guest speaker, and he gave us a very humorous talk which included a run-down of the changes which have taken place at M.I.T. since our own carefree days. Dancing and party songs completed the evening, except for those few hardy souls who took a late dip in the pool, only to find themselves covered with red dye. Sunday afternoon, most of us wended our weary ways home after a wonderful weekend of renewing old friendships. All in attendance felt that a vote of thanks was due to Stu Edgerly and his committee, composed of Jim Craig, Ted Heuchling, Don Hurter, Ken Mathews, John Maynard, Gene Parish, and Ned Tebbetts for making such an enjoyable weekend possible. Below are listed the names of those in attendance, most of whom came with wives and some even with children.

Howard Auerswald, Roger Bart, William Becker, Ray Benenson, Gene Bockhorst, Ray Brown, Bill Cahill, Jim Craig, Marshall Corbett, Ken Davis, Dave Denzer, Stu Edgerly, Joel Feldstein, Bob Fried, Fred Fuller, John Green, Jim Goldstein, Alan Gruber, John Gunnarson, Herb Hansell, Ted Henning, Ted Heuchling, David Hoag, Bob Hoffman, Don Hurter, Ralph Huschke, Bill Jackson, Seward Kennedy, George Ley, Clarence Lyon, Louis Martin, John Maynard, Bill McEwan, Bill McGrath, Bob Nelson, John Norton, Gene Parish, John Perry, James Ray, Ed Richardson, Don Robison, Reuben Samuels, Cliff Sibley, Bob Spoerl, Bob Striker, John W. Taylor, Ned Tebbetts, Donald Wahl, John Wandrisco, Robert Wentsch, Peter Wright, Stan Young, and Bill Scheild. In addition, Phil Jones of the Class of 1947 was our guest at the reunion. Also, Dave Black managed to be present for a brief visit Saturday evening. Last minute cancellations were Ken Mathews and Roger Sonnabend. If I missed anyone, my apologies. All else who read this and don't find their names above, please take note of the many friends who

did make it and resolve to attend the 15th reunion. To show you that it can be done, Bill Cahill took long distance honors, coming all the way from Los Angeles, while Roger Bart was a close second, arriving with wife and two children from Florida.

Some information cards and newspaper clippings have come in, so now to get up-to-date in the vital statistics department. First, it is my sad duty to report the death of Frank L. King. Frank was a professional golfer and tournament player. He lived in Estes Park, Colo., and was killed in an auto accident in July, 1955. Don Robison writes from Manchester, Conn., to say that he is now with Pratt and Whitney, working on the development of their nuclear powered aircraft engine. Sterling Bushnell writes from Muskegon, Mich., that Catherine Elaine, seven pounds eleven ounces, arrived in May, 1956. Bush is still working at Breneman-Hartshorn, Inc., helping to put work incentive systems into the plant. He expects to switch back to product development work soon, however. In addition to the above, I have received three other short notes. I. Eagle Levine is living in Baton Rouge, La., and is working for the Ethyl Corporation in that city. William R. Lindsay is located in Williamstown, Mass., and is the general superintendent of a commercial printing concern. Robert A. Summers of the Class of 1946G is living in Cambridge and works at Allied Research Associates, of Boston, as a project engineer.

The above is the sum total of information received so far for specific inclusion in class notes. As you can see, the notes are rather brief, and few in number. It is my fervent hope that I will have enough to write about each month to make a full and interesting column. However, I can't do it without hearing from you. So how about it? Sit down right now and send me a letter, to the address below. Let's hear about your new job, your new address, new offspring, new car, or even your old wife. Everyone in the Class will be interested to hear about it, and this is the best way to tell them.

Sometime in the fall, with the class agent's letter, there will be a new questionnaire. This questionnaire will serve a twofold purpose. First, it is to keep our files up-to-date and to provide information for future class notes. The other main purpose is to provide information for a class directory. The idea of a directory was pushed through the class meeting at the reunion by a vociferous minority. The idea is that the regular M.I.T. Alumni directories have errors in them, as well as being out of date two years later (when this directory is expected to be published). Also, it is difficult to find the slightly forgotten names of 1946 men among all the other names in the regular directories. Therefore, I seem to have won the job of trying to publish a '46 directory. I hope to get to this job next spring after receiving the filled-out questionnaires from each member of the class. But it is necessary that everyone send in the questionnaire, or the information in the directory will be no better than that in the other directories.

That's it until next month. Don't forget

to write that letter. See you in December.
— JOHN A. MAYNARD, *Secretary*, 15 Cabot Street, Winchester, Mass.

1947

This is reunion year and, hopefully, you have all by now received the first announcement of the activities planned for the weekend of next June 8 and 9. I shall, therefore, not repeat any of the details included therein, except to say that planning to attend the reunion should be uppermost in your minds. We are counting on a big turnout, and arrangements are being made to assure hearty camaraderie and good fellowship by your hard-working reunion committee, as you will hear from time to time through this column and regular publicity mailings.

I hope I will be forgiven if I don't practice what I preach—the reunion is not uppermost in my mind right now. I am writing this in the middle of September, and it is a last duty before I depart for a four-week holiday in England in a few days' time. Understandably, my immediate attentions are elsewhere. Nevertheless, I may possibly be able to convince some of our classmates over there—namely Garth Jones and Armando Medina—to join us at Lenox in June. Fred Ehrlich, who was at Derby for a year serving as Westinghouse representative to Rolls Royce, has returned, I understand. John Sproul has also returned home from England after a year's study in automatic computing at Trinity College, Cambridge, and is now working in data processing for the Distributing Organization of Western Electric.

Belaboring this business of reunions still further, Alumni Day last June brought as fair a collection of '47ers to the Institute as we've seen in some time. Carroll Andrews attended the luncheon, and brought his wife, Hazel, to the banquet in Rockwell Cage. Bob Aquadro and spouse were at the banquet as well, and attending one or all of the many functions were Maurice Bernstein, Phil Jones (erstwhile reunion chairman turned California renegade), Mort Loewenthal, Jack Rizika, Carlos Samour, Vic Savchuk, Art Schwartz, Stan Kordys, Harry Sherman, Rey Grammer, Don Van Greenby, Norm Holland, and yours truly. I saw Don Van Greenby again at Summer Theatre one evening some time later, and we had a chat about the things one chats about between acts of summer plays.

On a recent trip to Los Angeles, Dave Knodel and I dropped in on Howard and Jane Zwemer. The three boys—Dirk, four, Eric, two, and Weare, three months—were asleep. Howard is in development planning at Lockheed in Burbank. Another development planner is Bob Gates '48, who is with the Northrop group in Hawthorne. (I mention Bob, whom some Course XVI men may remember, because he was my roommate in the Grad House. What better reason? It does smack of nepotism though, perhaps.) If you ask a development planner what he does, he'll give you the cute answer that when he isn't developing plans, he's planning development. Some of these engineers ought to go into television.

We have news of a more prosaic sort

of others of our clan. Howard Adam is mill superintendent of the Gouverneur Talc Company in Gouverneur, N.Y. Tom Cummings is sporting a recently earned Ph.D. (June '55) in chemistry from the Case Institute, and teaches his subject as an assistant professor at Bradley University. He has three children—Jimmy, six, Kathy, three, and Becky, one. Sal Fucci joined Republic Aviation 18 months ago as a principal research engineer. He is in charge of a group designing antennas and associated electronic equipment for military aircraft. Thor Gislason is the New England sales representative for the Sporan Valve Company of St. Louis, Mo., and Rod Jenkins has transferred from oil production research with the Magnolia Petroleum Company of Dallas, Texas, to development work in refining with the parent company, Socony-Mobil Oil Company, in New Jersey. Bill Siler is on assignment from Boston's Jackson and Moreland, Inc., to Atomic Power Development Associates of Detroit, Mich., for design work in fast-breeder power reactors. In connection with this assignment, Bill addressed the national convention of the Valve Manufacturers Association in Chicago last spring on the progress of his work in atomic-powered electric-generating plants. Hal Brodsky was not long ago appointed assistant plant superintendent of the Fafnir Bearing Company in Newington, Conn. Before his promotion Hal was assistant chief metallurgist with the company.

Bob Hagopian, director of the engineering and research division of the Association of Casualty and Surety Companies, attended the President's Conference on Occupational Safety in Washington last spring. Bob makes his home in Jackson Heights, N.Y. Finally, it is my unhappy duty to report the passing of Paul F. Gorman, Jr., who took graduate studies with our Class.—CLAUDE W. BRENNER, *General Secretary*, Apt. 2-15B, 100 Memorial Drive, Cambridge 42, Mass.

1948

The response to Dave Cist's letter of last spring was intensely gratifying and it was good to hear the news from so very many of you. We hope that others, too, will follow suit and write soon.

From Mo Rifkin we received the following information: "For the past three and a half years I have been with the General Precision Laboratory here in Pleasantville, New York. The four years prior to that I spent at Sperry Gyroscope and Eclipse-Pioneer Division of Bendix working on the development of beam guidance controllers for autopilots. Since coming to G. P. L. my job titles have progressed as follows: System Test Engineer (airborne navigational systems); System Test Group Leader; Test Section Supervisor and then Quality Control Coordinator, all at the manufacturing division of the company, and presently Administrative Assistant to the Chief Engineer, Avionic Engineering Division.

"G. P. L. is continuously growing and in need of engineers interested in working with airborne navigation and bombing systems. If you run across any prospects

interested in living in Westchester, have them look me up.

"An interesting footnote to my short career is the change in commuting distance from home to office. With my start at Sperry the mileage has been 22 miles, 15 miles, 7 miles, 2 miles and now a quarter of a mile. This past March my wife and I celebrated our fifth anniversary with our family, which consists of Susan (3 years), Peggy (1½ years), and William, born last February. Along the way I also managed to pick up an M.S. degree in Industrial Engineering from Columbia."

Dick Worrell also sent us a very fine letter: "Have been living in suburban Philadelphia for seven years, and working for the Atlantic Refining Company. I'm known as a Supervisory Chemical Engineer, but don't have many men to supervise. For the last two years I've been doing extensive travelling (about 50,000 miles per year) in licensing activities. Most of the travelling has been in the U. S. and Canada, but last summer I spent a very interesting six weeks in Japan and Formosa. You may wonder whether I'm in military service with such an itinerary, but there's plenty of sales, technical service, and consulting to do in connection with the licensing of several petroleum refining processes. On the vital statistics side, we have two boys aged 2½ years and 4 months, respectively. The first was a perfect example of an income tax deduction, as he was born on December 31 at 3:00 P.M. We proved that you can't be so spectacular twice in a row when the second came January 26th. In our spare time we've been active in church work, boy scouts, choral singing, and civic affairs. Had a couple of interesting vacation trips, including a tour of Nova Scotia on a tandem bicycle (made the Halifax newspapers), and a cruise off the coast of Maine in a 45-foot sloop."

Bob Mott writes: "The day of a bachelor master at a school such as Hebron is pretty well filled from 7:00 A.M. to 10:00 P.M. with one sort of duty or another. Besides four classes and the preparations therefor, I have charge of the dining hall, the Camera Club, a dormitory corridor, and am frequently called upon for other miscellaneous performances, such as trips into civilization with boys bound for the dentist, etc. In addition to this, I am attempting to set up a temporary rifle range in our hockey arena — I should say a *portable* range to spread out in the arena — and to get some sort of riflery group going. Also, I have failed to mention that in the fall term I assist in the coaching of the lightweight football team and in the spring term I coach the Junior Varsity tennis team. So, as I think you can see, my time here is pretty thoroughly called for."

Harry Davis writes: "Perhaps some of us don't write about ourselves because we don't do anything interesting enough to write about. I'm still single, so I don't have any children whose births to report; for some years I was working on a Ph.D. and there's nothing very interesting in that (to anyone else). It has occurred to me that, perhaps, the reason your column seldom mentions the people I knew best at M.I.T. is that none of this little group has started the ball rolling by sending in

any information about themselves. Concerning myself, I graduated in Course VIII, in 1948, did some graduate work at M.I.T. for six years thereafter, and got my Ph.D. in mathematics from M.I.T. in 1954. Was an Instructor in math at M.I.T. during a good part of that time. Then served a one-year stretch in Oxford, Ohio, as an Ass't. Prof. in math (yes, stretch is about the best word I can think of; I was very unhappy there). Took a job as instructor at the University of British Columbia during 1955, and I like it there very much. The teaching load is light, and the summer vacation is 5 months long, giving me lots of time to do research in my field, which is topological algebra. This summer I am (only temporarily) at the Summer Research Institute, which is sponsored by the Canadian Mathematical Congress in order to give mathematicians in Canada a place to congregate during the summer for three months. We are paid to sit and think, or do anything we like to do, for three months. Will return to British Columbia in the fall. There are quite a few M.I.T. graduates on the faculty there, but all considerably older than myself, except for Barron Brainerd (who may be Class of '48, but I'm not certain . . . didn't know him when I was there). Thus, you see why some of us don't write. We don't do anything that is essentially interesting to others. But we find reading about our more active classmates quite interesting nonetheless." (Thanks, Harry.)

Bob Peterson brought us up-to-date with his business card and the following interesting comment: "Outside of what you see in the Alumni Register, I am presently living in Harrisburg, Pa., and selling for the I. E. Robinson Company of Philadelphia, Pa., who are manufacturers' representatives for a number of companies. For the record, I have been married for three years with June 13 being our third anniversary date. No little Petersons yet, so that leaves my wife Ruth and myself still able to get around quite a bit, etc. Maybe by the 10th class reunion we'll have a new Tech candidate (or two)!" From Dan Muss a brief item: "After 8 years in industry, I am taking L.O.A. from Westinghouse to return to school. I enter the U. of Pittsburgh as a graduate student in physics in the fall to study for a Ph.D."

Henry Warner has apparently become quite a financier. He writes: "I am happily engaged in Wall Street. I graduated from the Merrill Lynch, Pierce, Fenner & Beane Training School for account executives and worked for them in that capacity for several years. An account executive, by the way, is a customer's man — only fancier. Since 1954, I have been with Heller & Meyer in East Orange, New Jersey. You might be interested in knowing that I do a good deal of lecturing on the various phases of the subject "You and the Stock Market." I happen to be Chairman of the Investor's Information Committee in our area, as well as a member of the college lecture team for the National Association of Manufacturers. The former group was formed under the auspices of the New York Stock Exchange. These two associations provide me with most of my speaking dates. The

sole objective of this work is educational. I married the former Ina Finkelstein five days after graduation. Our family now consists of two blonde daughters, Dorothy, age 5 and Marjory, age 2. We live in Union, New Jersey."

And last, but certainly not least, the following letter was received from Dave Vigoda: "Upon leaving the Institute, I was employed as an electrical designer with a leading engineering concern in Boston for one year. I left this position, oiled up my slipstick, dusted off the growing library and entered the Graduate School at Harvard where in the Spring of 1950, I was awarded a 'Magistri in Scientia' degree. Thus equipped, I entered the family owned enterprises taking control of the Norfolk Electric Co. of Boston. It is with pride that I announce that this concern has grown from one which was unknown beyond the Boston City limits to where it now plays an important role in the electrical construction field in New England. One project, on which we are presently engaged, and one which is giving me great personal pleasure is the electrical installation at the new Karl Taylor Compton Laboratories at the Institute. Here, I have renewed some old acquaintances with past instructors and classmates who have remained at Tech for one or another reason. Though a resident within the area, I was surprised at the changes that have taken place at the Institute in the past eight years. The coming tenth reunion is a must for the entire class if only to see these improvements. My personal life in a nutshell: Married Sorina — for those who know her; have two wonderful children — Karen, age 5, and Robbie, age 3; still a very active radio 'ham' — W1QKF. With anticipated pleasure, I look forward to seeing all of you of our Class at the tenth reunion."

A card was also received from Michael and Kay Kami announcing the birth of their daughter Gail Joan, on November 17, 1955. By the time this issue goes to press, it will be Gail Joan's first birthday rather than a birth announcement. Our belated congratulations are in order. The summer also brought several items of interest from the News Service clippings. Bob Crooks of Newton Lower Falls, Mass., who went on to George Washington University Law School in Washington, passed the Massachusetts bar examination in May. Bob is now married and the father of two children. Ken Brock has been appointed advertising and sales promotion manager of Fenwal, Inc., Ashland, Mass., a manufacturer of industrial temperature controls, and fire and overheat detectors for aircraft and industrial use. He will head up advertising, publicity and sales promotion activities for the company's newly expanded industrial sales and aviation products divisions. Ken comes to Fenwal with extensive experience in the sales promotion of electronic equipment and instrumentation. Formerly, he was sales and advertising manager at Browning Laboratories, Inc., of Winchester, Mass. His previous affiliations include advertising and sales promotion manager of the Electronics Divisions of the Gabriel Company in Cleveland, commercial sales and advertising manager of Workshop Associates, Inc., of Needham,

Mass., and sales manager of H. H. Scott, Inc., Cambridge, Mass.

Tom Waldron, who joined the General Electric Company in 1948 upon his graduation from Tech, has been promoted to the position of operations research and synthesis specialist. Tom has worked on production control surveys, and later on the installation of the Univac system. He was a procedures specialist at the Plainville, Conn., plant of General Electric before his recent promotion. Nancy Dean (Mrs. Bob Dean), very kindly brought us up-to-date with the following note: "Do your records also include 'Meg' (b. 19 June 1952) and 'Janie' (b. 19 June 1954)? Last November, Bob received the Pi Tau Sigma Gold Medal, in Chicago, for outstanding contributions to mechanical engineering within 10 years of graduation. In July of this year, he leaves the M.I.T. Faculty to become head of the new Advanced Engineering Department of Ingersoll-Rand Co. in Phillipsburg, New Jersey. We'll be living in or around Easton, Pa., and are now absorbed in finding a house!"

Stromberg-Carlson Division of General Dynamics Corporation announced in March that it was entering the nuclear science field. Heading the new nucleonics research section will be Bob Deming, who joined Stromberg recently after having served more than four years as a research staff member at the Los Alamos Scientific Laboratory in Los Alamos, N. M. Bob received his M.S. at Tech in the Class of '48. Leon Brettler has joined the firm of Shapiro, Bernstein and Company, a publisher in Hollywood, Calif. Leon was associated with Du Pont as an industrial engineer in the building of the hydrogen plant for the U. S. government before making his recent connection. Al Brayman is now a mechanical engineer for Charles T. Main, Inc., of Boston, and has been working for the past eight years on various phases of atomic energy programs. During this period, his company has been under contract to the Atomic Energy Commission, the General Electric Company and, at present, the United States Air Force.

Dwight Norris, another classmate, has assumed the post of head of the clarification department at Charles Pfizer and Company's, Groton, Conn., plant. Dwight has been in the clarification department since last January, prior to which he was in antibiotic recovery three years, holding the post of assistant department head since December 1953. A veteran of three years in the U. S. Air Force, Harry J. Beattie, who joined the General Electric Company in their physics training program in 1949, is now carrying out applied research in the field of high temperature alloys at General Electric's Thomson Laboratory in Lynn, Mass. In 1954, Harry received the Howe Medal from the American Society for Metals for his research on the structure of high temperature alloys. News has also been received of an engagement. Carl Accardo, earlier this year, became engaged to Edna Ertle of Red Bank, N. J. Carl is a scientist at Evans Laboratory and served in the U. S. Army Signal Corps during the Korean Campaign.

Is is a distinct pleasure to communicate

in this manner with all of you when news is so abundant. Our sincere thanks to you all. — WILLIAM R. ZIMMERMAN, *Secretary*, Moraine Paper Company, Division, West Carrollton, Ohio. RICHARD H. HARRIS, *Assistant Secretary*, 26 South Street, Grafton, Mass.

1949

Shepard Bartnoff is now serving as advisory scientist at the Westinghouse Commercial Atomic Power Activity in Pittsburgh. He was formerly an associate professor of physics at Tufts. Lieutenant (jg) Fred Berg is stationed at the Naval Air Rocket Test Station, Lake Denmark, Dover, N. J., where he is the Aeronautical Engineering Duty Officer. Fred was recalled to active duty in 1951, and served at the Naval Air Missile Test Center, Pt. Mugu, Calif., before coming to Dover in 1954. Ed Bolton is working for Sigma Instruments in South Braintree, Mass. The Bolton's first son, Steven, was a year old in August. Russell Bracewell is continuing his work as an experimental engineer with National Twist Drill and Tool Company in Rochester, Mich. Russ married Pat Clarke in 1952, and they now have two children. He would like to hear from other Tech Alumni in the Birmingham, Mich., area as he is too far from Detroit to make the M.I.T. meetings there.

A feature article in the *Boston Herald*, June 2, 1956, describes the diverse activities of the Massachusetts Safety Council and Manager Bruce Campbell. Bruce and his staff will conduct, for any Massachusetts community, a comprehensive safety study, providing the community indicates a willingness to follow-up council recommendations. The council is supported by 200 member firms and answers some 10,000 requests for service each year. Through a somewhat dated news-clip of last May, we learn that Russ Cox is now a vice-president of Cabot, Cabot, and Forbes, the Boston industrial development firm. Russ has been supervising the planning and construction of the New England Industrial Center in Needham, the Waltham Industrial Center, and the Peabody Industrial Center. He has also supervised design and construction of buildings for Sylvania and Abbott Laboratories. A note in *Retailing Daily* last June announced that Robert Darden has joined the Morgantown (N.C.) Furniture Company in the cost and industrial engineering department. Bob was formerly with Champion Paper in Canton, Ohio. John Emery is working as a supervisor in Du Pont's Industrial Merchandising Textile Fibers Department in Wilmington. He was formerly in Du Pont's Rayon Research Laboratory in Richmond, Va. Paul Massier is now working as a senior research engineer at the Cal Tech Jet Propulsion Laboratory where his studies include analytical and experimental work on heat transfer problems. Bill McCutchen is continuing his work as a project leader in the Electrochemical Engineering Department of Dow Chemical Company's Texas Division. He and Joyce Forse were married last June. Martin O'Brien is now working with Grede Foundries, Inc., in Milwaukee.

Thanks to John Goppelt for his letter.

John graduated from the University of Pennsylvania Medical School in 1955. He interned at the Bryn Mawr (Pa.) Hospital and is now a resident physician at the Pennsylvania Hospital in Philadelphia. John and Martha Rowland were married in 1955. Dr. Geoffrey E. Goring is working for Union Carbide Nuclear Company, a division of Union Carbide, and has been assigned to duty at the Argonne National Laboratory in Lemont, Ill. George Hatsopoulos was appointed last January to the position of Assistant Professor in Mechanical Engineering at M.I.T. Clement Pease and Rena Pasqualini were married last June in Agawam, Mass. Clement is working as a development engineer for the Plax Corporation in Hartford, Conn. Francis Pooler is now with the U.S. Weather Bureau at the Public Health Service Sanitary Engineering Center here in Cincinnati. He is working as a research meteorologist. Dave Powers is married and living in Media, Pa., where he is a production supervisor for Westinghouse.

Howard Reuter and his wife, Judy, recently completed a four-week tour of Europe. The Reuters flew to England, France, Germany, and Denmark, and rented cars to drive to Wales, the Rhine Valley, and the French chateau country. Howard is doing radar development work for Westinghouse. Bill Riley has resigned from his work with the U.S. Navy and is now maintenance planning superintendent for Ethyl Corporation. Tom Toohy is selling International Business Machines electronic computers and punch-card accounting machines in mid-town Manhattan. Tom commutes from Rye, N.Y. On September 11, the Toohys welcomed a second daughter, Sandra, to their family.

May we suggest that you get out and vote. While you're at it, mark an extra ballot with news about yourself and send it along to us. — O. SUMMERS HAGERMAN, Jr., *Secretary*, 740 Hand Avenue, Cincinnati 32, Ohio.

1951

When the final tally was in for the Class Reunion in Plymouth, Mass., last June 9 and 10, it showed that '51 had produced the largest attendance to a fifth year reunion in the history of M.I.T.: a record total of 229! Of these, 140 are members of the Class, and the remainder are wives and dates.

Attendees to the reunion arrived at the Mayflower Hotel all during the afternoon and immediately set themselves to the pursuit of many activities. Some of the sturdiest basked in the preview of December air in Plymouth, while watching others engaged in numerous athletic events in front of the hotel. Competition varied from baseball to shuffleboard, and there was a minimum of aching muscles despite the fact many of us hadn't done so much running around in five years. Others sought the warmth at the bar. Some bachelors were detected letting an eye or two fall on the fairer delegates to other conventions sharing the resort. We kept pretty busy right up to the cocktail party and then some. Didn't take any time at all to exhaust the free cocktails. Then all you could get for free were little green pickle pins — thousands of them. We

rolled into the dining hall for a very good roast beef dinner. Had to be careful, though, not to partake of the many souvenir trinkets solicited for the reunion by Jack Dunn. Everyone got reminders, such as pens, pencils, M.I.T. ashtrays, candy, headache tablets, to mention a few.

After dinner, the results of our class elections were given by Mert Flemings, Secretary of the Nominating Committee. Our new president is Stan Marcewicz, who has contributed so much to our Class since we were first assembled at the Institute, that he well deserves his new post. Dick Willard and Bob Gooch were elected secretary-treasurer and assistant secretary-treasurer, respectively. Retiring president Art Wasserman briefly reviewed our college experiences and "turned the gavel over" to Stan, who reported that, as he leaves the office of class treasurer, our treasury is solvent — a fact the undersigned greet with pleasure. Paul Grady, our good master of ceremonies, kept us entertained with the awarding of several "prizes" to classmates of distinction: the man with the most children (a box of canned goods); the baldest (a hairbrush); the heaviest (an adding machine); and others. The dancing after dinner seemingly wore out very few as various parties kept going late into the night.

A few hardy souls were out on the baseball diamond again Sunday morning. The weather broke, and we finally had sun, but not in time for the clambake, which was held indoors. The lobsters, clams, corn, and so forth, tasted as good inside, though — the beer must have made the difference.

Those attending the reunion included Marshall Alper and date, Joe Amblard and wife, Dick and Debby Andelman, Dick Armstrong, Jim Ballou and wife, Jack Barcinski and Barbara Veevers, Dave and Betty Lou Bean, Manfred Becker, George and Margaret Boyden, Lawrence and Lynn Bray, Ed Bronstein, Don Brown, Marvin Burns and date, Tom Callahan, Bill and Ginny Cavanaugh, Steve Chamberlain and date, Ron and Rosemary Clanton, John Clegg, George and Kathleen Collins, Ed Dawson and Carolyn Kemp, John and Ursula Dennis, Karel den Tex, Ralph Devir, Bill Diffin and wife, Fiore Di Giovine, Dan and Shirley Esakov, Steve and Myra Eisen, Oscar Falconi, Francis and Valerie Fannelli, William and Helena Farrel, Mert Flemings, Tom Ford and Gay Michon, Dick Foster and Marilyn Stride, Bill and Mary Ann Freeman, Jim and Etta Friend, Herb Gevriman, Jay and Frances Gilmore, Paul Grady, Saverio and Jeanette Greco, Tom and Carolyn Hagan, Ted Hadel, Dick Hare, Gerry Hartstein, Hank and Mary Helfrich, Charles Hieken, Parker and Joyce Hirtle, Richard Howe and Ann Stafford, Gerald Ikelheimer, Gordon Ingwersen, David Janis, Ernest Jensen, William Kahl and Marion Braever, Morley Kahn, John and Lorraine Kalvinskis, Vello Kampman, Peter Keller and date, Mike and Regina Kesler, Walt Kinzinger, Robert Knopf, Charles and Carol Kurtz, Lawrence and Harriet Kuszmaul, Lawrence and Rita Lamarre, Bill Landenberger and Georgia Pappas, Earl and Ruth Leffler, Charles Lenz, Howie Levinston, Stan Logue, John Lowry, Bill

and Mary Lucas, Bill and Barbara MacDonald, Daniel Magnus and wife, Charles Maki, Stan and Irene Marcewicz, Emirino Marchetti, Louis Marcus and date, Manford Markowitz, Henry and Carolyn Marsh, John McCarthy, Fred McCauley and date, Marty Miller, William Miller, Nick Melissas (scouting for the '52 reunion), John Monday, Forest and Marilyn Monkman, Ed Monz, John Morganthaler and Kathleen Merriman, Russ and Barbara Parker, Pete Philliou, Bill Penkham and date, Orlo Powell and Carol Fessenden, Ralph and Virginia Romano, Richard and Carolyn Reuther, Milt and Elaine Robinson, Lee Rohde, Jim and Marguerite Russell, Paul and Helen Saunders, Lawrence and Carolyn Schneck, Dave and Pat Schoeffel, Howard Schwartzman, Clint Seeley and Gail Robyn, Eleanor Semple, John and Edna Sewell, Jim and Nance Shepherd, Joe and Nancy Sherrill, Philip and Judith Simmons, Denny Spangler, George Stevens, Ed and Mary Stringham, Sandy Sussman, Bill Surette, Louis Sylvia, Louis Tedeschi, Charles and Margaret Terrel, Tony Terrenzio, Herb Ullman, Jack Vernon and wife, Dan von Recklinghausen, Carlton and Lucy Walker, Art Wasserman and Sheila Wharton (now Mrs. W. as of June 24), Harry Wolf and date, Burt Woodward and wife.

Others attending were the reunion committee, composed of Hank and Ann Spaulding (Hank was reunion chairman), Fred and Janice Aldrich, Aaron and Carolyn Brody, Gil and Anne Cook, Walt and Madeline Davis, Jack and Marjorie Dunn, Jerry Elkind, Marv Grossman and wife, Al Larsen and wife, Bill and Maria Maini, Dick and Carolyn Reedy, Jay Rosenfield and wife, Sam and Phyllis Rubinovitz, Dan Sullivan and wife, Dick Willard and Gail Rennie (now Mrs. W. as of June 23), Bob Woolworth and Sylvia Stanley. Other members of the committee unable to attend were Marv Baker, Charles Miller, Charles Orne, Hays Penfield, Bill Powell, and Priscilla (Maurer) Raymond.

Next issue we'll report the various items of class news that have been coming in over the summer. — RICHARD W. WILLARD, *Secretary*, Box 105, Littleton, Mass. ROBERT S. GOOCH, *Assistant Secretary*, Freese and Nichols, 407-410 Danciger Building, Fort Worth 2, Texas.

1952

Hi. It's nice to be back in this column again after those blank months and the notes written by Stan Sydney and Bob Briber. I hope that from now on we'll be here every month, if only to report the rumors of the existence of the Class of 1952. I've just retired from the professional student status for at least long enough to earn enough money to be able to afford another campus holiday. I suppose all good things must come to an end sometime. Bob Danforth, though, is now entering his tenth year at Wellesley (I'm afraid I'm only starting my ninth year at that wonderful institution of learning); Bob and I have been considering running guided tours around the campus for new students and housemothers. They're not looking as old as they used to. Bob, incidentally, is officially spend-

ing his waking hours working for his dad's company, and is well on his way to his Administrator and Salesman, Junior Grade merit badge.

We must interrupt this train of thought for the momentous announcement of the century, or at least of 1956. Bob Briber, one of the last living charter members of Bachelors, Anonymous, bit the dust. It was sad to see the smile on his face as he walked down the aisle on August 4, hand-in-hand with Kathy Armstrong, of Mount Holyoke fame, in the City of Brotherly Love — Philadelphia. A fitting and proper wake was held afterwards with such stalwarts from the Class of 1952 as Nick Melissas, Sandy Isaacs, Stan Sydney, and this rather hung-over observer dourly making observations on the vagaries of life, particularly such accidents as bedecking Grandma's car with a Just Married sign and the appropriate pebbles in the hubcaps instead of that of the newlyweds. Bob and Kathy are now back in Cambridge, where Bob is working (it is rumored) at M.I.T. as assistant to the President.

Strangely enough, the next time I ran into the above-noted motley crew was at the bar of the Faculty Club, with the addition of Herb Eisenberg to provide a more collegiate atmosphere. The excuse for the gathering was a meeting of the Class of 1952 Reunion Committee. I unfortunately arrived somewhat late, missing out on the earlier quitters who included Chuck Beaudette (now working at the Electronics Corporation of America on the bonnie banks of the Charles) and Sandy Kaplan (a recent degreed expatriate from the Harvard Business School — exact job not known). Nick, as you probably all know by now, at least through the grapevine, is in charge of the Reunion Committee, and is promising a weekend that would even make the old Bemis boys' mouths water. We are looking into hotels in the Cape area; the "we" means Sandy Isaacs (our hotel impresario, managing one down in Providence), Bob Briber, and Nick, I guess. By careful reading of this column over the next few months, you, too, can be in the know on what's going to happen the reunion weekend and how you, too, can obtain those precious little pasteboards which will entitle you to prove that time has proven no kinder to your old friends than it has to you, and that you are now professional alcoholics. Keep tuned in on this wave length for the latest news.

Let's see now — I may as well mention what some of the names listed above are doing to get enough pin money to keep them in luxuries. Nick was assistant to Dean Brooks at the School of Industrial Management and has just taken an administrative job in the M.I.T. Servomechanisms Laboratory; he hasn't been there long enough as of this writing for the gentleman who shares his office with him to have met Nick. Stan is now up at Fort Devens (as a civilian working for a private contractor), engineering and supervising the building of a housing project there. Herb, as far as I could tell, is still doing contracting work in Boston, but really has as his main occupation just being married.

Louisville, Ky., heard wedding bells for Jack Copenhefer and his pretty little

Southern Belle, Ginnie, this past June. Jack is now working in the bourbon capital of the world for a filter company. It should at least be noted in passing that he received his M.B.A. from Harvard Business School in June. Lou Karvelas, his roommate prior to the time of his marriage, has headed back to the wide-open spaces of the Southwest; he's now at Humble Oil in Bayport, Texas (also the home of "Papa" Joe Moore, another Humble-r). No word received from Sarkis Zartarian, Dave Weber, Jim Reese, other recent M.B.A.-ers from Harvard.

While wandering around a mixer dance at the Harvard Summer School, I was very surprised to run into Dick Lacey and Wally Lebowitz. It should be mentioned here that none of us was supposed to be there. Wally, it seems, is now Dr. Lebowitz, playing medic at the Massachusetts General Hospital. He mentioned that Ed Margulies was doing his internship in Albany, N. Y., and Art Auer in St. Louis, Mo. Dick Lacey is working on his Doctorate in Physics at M.I.T. Burge Jamieson and his family are now living in Framingham, Mass., where they are busily taking care of a recent addition to their clan named Sandy. Burge is doing project engineering for the Doelcam Division of the Minneapolis-Honeywell Company in Boston. This news is very recent as I just ran into him tonight.

Steve Learnard was another person I accidentally came upon in front of the Harvard Coop. Steve is now married and has happily settled into a life of engineering for the Arthur D. Little Company, and does square dancing on the side. The evil effects of Alabama and Utah are probably still tainting his life. Was very surprised to find Hal Galpern yesterday evening in a night course I'm taking at Northeastern. He seemed to have survived very nicely his two year ordeal with a Radiological Monitoring team down in Alabama and in the proving grounds of Nevada. He is now with the General Electric Company.

Still have more news, but to be dramatic I'll save it for next month. Please write if you have any interesting ideas for our Reunion; even trite ideas will do. Nick would like to hear from as many people as possible; I'll settle for an echo. Your footsore Secretary. — STANLEY I. BUCHIN, *Secretary*, Bay State Abrasive Products Company, Westboro, Mass.

1954

The typewriter is a little dusty after these past few months of disuse, so if the column is a little blurred this time, it's just the dust, and has nothing to do with the weekend Rog Griffin and I just went through in Cleveland. Anyway, let's try to catch up with some of the members of the Class.

The postman has been ringing the bell with reckless abandon since the beginning of the summer. John Dixon writes from Korea that he arrived over there just in time to say good-bye to Bob Avakian, Don McGrath, and George Schwenk, who are all now back in the United States. These four all managed to visit Korea through some sort of agreement with the Army. John also reports

that Marty Raab is, or at least was, in Germany with the Army. Another letter was from Lynn Mackenzie, writing on behalf of husband Alan. The Mackenzies are the proud parents of young Kenneth Jeffrey, who was born last January 20. Al is currently stationed in Washington with the Army. Lynn also notes that Don Cassidy is now at Fort Monmouth, N.J. Bob Evans, who managed to get into the Infantry and then ship to Korea, claims that he really likes it over there, except that he is separated from his wife, the former Lois Ellen Herr of Radcliffe. Bob and Lois were married sometime in the not-too-distant past, but he didn't mention the exact date. Dick Hayes, on the other hand, writes that he is still single. He received his "silver wings" from the Air Force in June, and is now working with the Research and Development Command at Wright-Patterson Air Force Base in Dayton. From M.I.T., Larry Leonard writes that he got his master's degree in metallurgy last June and is now hard at work on his doctorate.

A few more members of the Class have taken the plunge and gotten themselves married. Our illustrious president, Dean Jacoby (no, he is still single as far as I know) was best man on September 2 in LaGrange, Ill., when Ron McKay and Sarah Ruth Stacy exchanged vows, as they say. Alex Lett and Joan Helen Gospodarek were married in Adams, Mass., on last April 14. Alex is now stationed in Washington, D.C., with the Army. Charles Leonard and Antonia Colby walked down the aisle in Chestnut Hill, Mass., on July 21. Peter Katchis and Mary Tchakourides were married in Brighton, Mass., on January 29. Pete Peterson married Carole Vandersull in Akron, Ohio, on July 14. And Fred Zanella is also happily married. I've received several notices about Fred, but none of them mentioned his wife's name or the date of the wedding. It seems to be pretty well agreed, however, that Fred is now back at M.I.T. after two years in the Army. So, congratulations and best wishes to all.

As usual, Dean Jacoby has sent along several items. It was a six pound, three ounce boy, Andrew Scott, for Dick and Charlee Wallace on June 20. Dick is with the Sperry Company in New York. Bob Anslow has finished at Harvard Business School, and is now assistant to the vice-president in charge of engineering at Raytheon. Bob expects to join Uncle Sam's forces in the spring. Bob Law is a special weapons liaison officer aboard an aircraft carrier somewhere in the Atlantic. Larry Holmes is stationed at Wright-Patterson Air Force Base, Ohio. Dave Wones is working on his doctoral thesis in Middlefield, Mass., at last report. Dean reports that Dave is still single, and enjoying it.

As mentioned above, Rog Griffin and I had a very enjoyable weekend in Cleveland during September. We spent most of the time just living it up, but somewhere along the line I picked up the information that Rog is still at the Detroit Arsenal, that he expects to leave the Army sometime this month, and that he, Erik Gelotte, and Bill Romig have all enjoyed their Army career in Detroit. Bill, by the way, just to be different, spent his

last thirty-day leave in Europe, and then returned to the United States to go back on duty. Bob Schultz has a fellowship at the University of Illinois where he is working on his doctorate in chemistry. Sam Losh gave me a call from nearby Scott Air Force Base on Sunday morning, August 12. It was rather early when Sam called, but as I remember, he said he is with the Air Force, stationed in Rochester, N.Y., and was en route somewhere when he called. And here in St. Louis, I am still plugging away at St. Louis University, trying to instill in the freshmen a love for mathematics, and sneak off with a degree at the same time. — EDWIN G. EIGEL, JR., *Secretary*, 3654 Flora Place, St. Louis 10, Mo.

1955

Greetings! This promises to be the most incoherent column yet — partly because Denny is not available to proof-read and partly because the number of folks we have heard from since the last column is tremendous. Tremendous!

On the subject of Europe, Chan Stevens won a Rotary Fellowship and left in August for a year in Birmingham, England. He attended the Edinburgh Festival and made a tour of Swedish industries before settling in England. And coming in the other direction after a year on the Fulbright Plan were George and Joyce Rubissow, who returned to Tech; Bob and Anita Kolenkow, who were headed for Harvard at last report; and Tad Hoshour, who planned to continue his education at Fort Devens — among others from whom we have not heard. Mr. Shapiro has returned to M.I.T. this fall to finish work on his Master's.

Norm Poulin left for Germany in late May to serve there with the Quartermaster Corps, and Barry Lucas is with the Air Force near Paris. Some folks have done quite a bit of traveling without leaving the country. Stan Barringer really gets around. After completing his year of graduate study in transportation at Yale, he made a grand tour of the Canadian Northwest and the West Coast of the United States by rail. On August 1, he started work for the New York Central, and as far as we can tell, he hasn't been in the same place twice since! Stan, by the way, was one of a very small and select group of members of our Class attending Alumni Day in June; he was with his father who was returning for his 35th reunion. Others from '55 who made at least part of the festivities were Chan, Bob Morgan, in from Devens, and Fran Selvitelli, fresh from the West Coast, where he had been testing with Raytheon. Back to the travelers — Dave and Mar Nasitir left sunny California in July and took the slow route to Winnetka, where they spent the summer. Dave won a fellowship from the Merrill-Palmer School in Detroit, so they'll be spending this year there. Tobey and Dave Brooks also parted company with California and spent the summer in New Mexico before returning East. Dave was due at Belvoir in September, and Toby planned to go back to school at Boston University. Phil Molten reached the sands of New Mexico the hard way; he is stationed at the Army

Electronic Proving Grounds at Fort Huachuca. He writes that Frank Urgier is assistant United Nations architect in Jordan!

Devens was overrun with "our boys" in the spring—Bob Morgan, Harry Schreiber, Bob Grout, Dave Snider, Bill Chandler, Jim Bartsch, Bernie Klim, Haller van Bergen, Ed Pulsifer—but they seem to be scattering now. Charlie Prewitt completed his tour of duty there and returned to M.I.T. in September. Pete Pratt has been at Belvoir, and he is now engaged to Jackie Baker of Seattle and Smith. Pete Peterson wrote from Beaufort, S.C., where he is serving the Navy as assistant resident officer in charge of construction. He completed O.C.S. in Newport in January, and was married in February to the former Nancy Venderbush of Grosse Pointe, Mich., and Endicott. Doug Wixson is flying jets somewhere for the Air Force, and Andy Henesteg and Marty Gilvar are upholding the civilian end of the aviation business at Boeing in Seattle, and Pratt and Whitney in Hartford, respectively. Ash Stocker went to Aberdeen in June for his six months tour of duty with the Army, leaving Sue back at Tech in the Admissions Office. Glen Jackson still seems to be too entranced by the Air Force to write, but we hear that he has graduated to Texas and jets. Milton Essoglou returned early in the summer from Alaska, where he worked on air bases with a construction company. He planned to enter O.C.S. this fall, hoping to end up eventually in the SeeBees. Dick Gardner is another recent acquisition of the U.S. Army. He's now at Fort Jackson, S.C.; Ella remains with Ford in Dearborn. And Olaf Stackelberg joined the ranks this summer in Arkansas, leaving Cora in Minneapolis, where she continues to work for Honeywell.

There are a few civilians left! Sea McGown writes from Alexandria, Va., that he and Fran are enjoying life there, although the Potomac is even dirtier than the Charles; he's working as a naval architect with the Bureau of Ships of the Navy Department in Washington. A mysterious postcard from Ellen Dirba shows the plan of her wonderful new house in Denver. Is it really yours, Ellen? Back in June, Allan Boardman supplied us with a news issue of the *West Coast Bilge* from South Gate, Calif., where he is doing missile work at North American in the same group as Joe Jerger. Seems that Bert McMaster, with Lockheed at Burbank, and Bob Trainer, with Northrup, are in that territory. Bob, by the way, was engaged to Ann Light from New York. Jack Graef and Don Lodin were in the aircraft area too 'til their numbers came up and they joined the Air Force at Edwards and Moore Air Force Bases respectively.

Before the inevitable "wedding bells

department," we'll give the recent stork notices. Tom and Joyce Hamilton, now the proud parents of a son, left Boston in June, after Tom received his degree in Metallurgy, to return to Anniston, Ala., where Chip can reap the benefits of a good Southern upbringing. Lee Zucker's first-born arrived in Texas, where Lee is stationed with the Air Force, and the Pete Bernies added another shortly before he left for the Air Force this summer. Jim and Judy Bartsch became proud parents while at Devens, and Lloyd is with Procter and Gamble.

Now to the weddings! Via the grapevine, we hear that Paul Mosher has claimed a little Texas gal as his bride. In April, Bob Greene and Edith Richards, of Weymouth and Boston University, were married; they were headed for six months at Aberdeen after their honeymoon. In May, Shimshon Frankenthal and Joan Newman of Noroton, Mass., were married at the M.I.T. Chapel. They are now living in Newton, and Shimshon is working with Raytheon in Waltham. Roy Salzman took time off in June from his Air Force duty at Graham Air Force Base in Mariana, Fla., to travel to Maine and claim Nancy Gagnon, a Chamberlain graduate, as his bride. About the same time, John Farmer was married to Gay Stock of Dover, N.H., and Wheelock. They are now living in Boston, and John is with General Electric in Lynn. Also in June, Russ Meyerand scored a phenomenal Course VI victory by escorting Mary Guilleman from the altar in Wellesley. Mary was, of course, a Tech coed after attending Wellesley College. Russ and Mary are now living in Somerville, and Russ is continuing his graduate studies in nuclear engineering. Sally Reeves of Pittsfield, Mass., and Wheelock College, and George Edmonds were married in late June, and he is now with the Air Force somewhere. And at last report, Walt Fritz and Sue Brunstrom were planning to take the vows in July.

Whew! I believe that we've actually run down for the time being—well, not quite. As you will notice from the new address, I have again succumbed to the wonders of the East. I have terminated my engineering career in Cincinnati to return to Columbia University, where I am an instructor in the Department of Chemical Engineering. Now don't panic! I'm not disillusioning America's youth in the classroom; instead, I'm acting as administrative aid in the department. I am still hunting for a place to live, so I can't invite you over, but the address below will be fine for letting us know what you're up to. Thanks so much for all the mail that we received over the summer. The quantity has become so great that answering it all individually is impossible, but we do

cherish every word! — DELL LANIER, *Secretary*, Department of Chemical Engineering, Columbia University, New York 27, N.Y.

1956

Graduation day was wonderful and impressive, and I am sure we will have happy memories of it for many years. In that period of mass exodus from Tech, it seems that many of us stopped to see a person who is not cum conscious—a minister. Congratulations to those who have decided to take someone with them into the new life of the five-day week.

Heading this group was our Class President, George Luhrmann, who married Miss Winifred Bruce of Staffordville, Conn. Dick Benjamin wed Miss Nancy Farland. Dave Hanson exchanged vows with Miss Alison Robbins of Wollaston. Bells also rang for Bob Howe and Miss Virginia Mayo of Wellesley; Dick Kinney and Miss Jeanne Ferguson of Lexington; Dave Kelley and Miss Barbara Gelder of Scranton, Pa. Undoubtedly, there were many more, although a few of us did manage to escape temporarily. Dick Kane, our famous scholarship donor, is apparently the student to do such while still an undergraduate at Tech.

We are well represented at graduate schools around the country. Bob Paschall is at the University of Illinois; Steve Cohen and Bob Biehl are at Harvard Medical School; Jesse Rothstein is at Harvard Law; Paul Brown, Dick Miller, Bill Quam, and many others are at Tech; Wing Tsang is at Cornell; Phil Bryden is at McGill; George Luhrmann is studying at both Tech and Harvard. Those of you in the armed services are not forgotten. The Worcester paper had an action shot of Guy Schmidt using a shovel at Fort Devens—memories of Walker Lounge.

I know that many members of our Class are gratified with the knowledge that Tech plans to follow many of the student recommendations on redesigning student living on campus. This will be done to the tune of seven or eight million dollars. I feel safe in saying that there are few, if any, other schools in this country that would give their students such an honor.

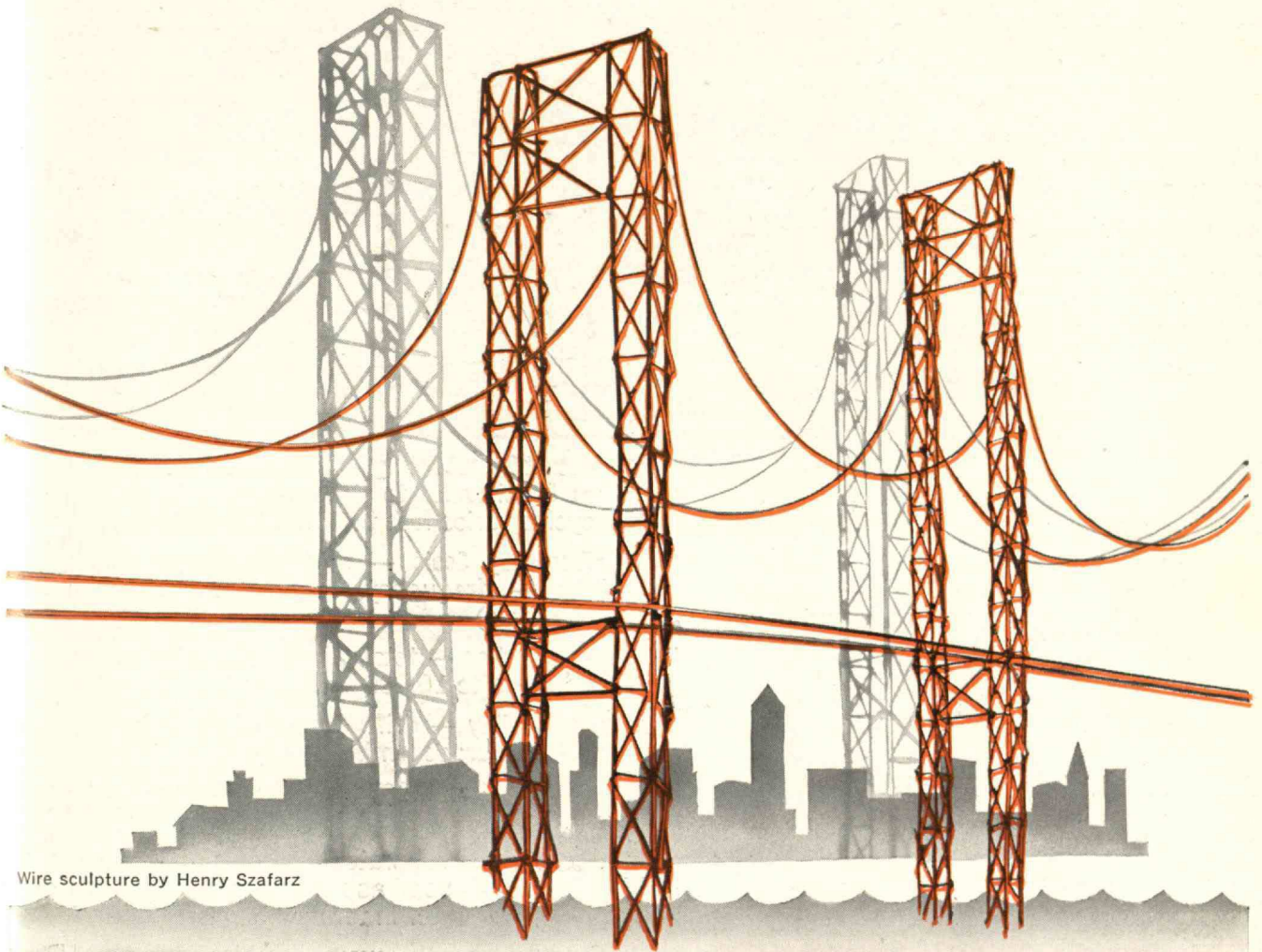
Information for succeeding issues is needed six weeks prior to the month of publication. I know we are all anxious to hear about your job, trips, or that gal who has consented to be your everloving. I will be in the Western Kentucky and Illinois area until next June; so, if any of you are around, let me know. Phil Bryden has consented to be my assistant in this work. — BRUCE B. BREDEHOFT, *Secretary*, 1528 Dial Court, Springfield, Ill. M. PHILLIP BRYDEN, *Assistant Secretary*, Box 37, West Topsham, Vt.

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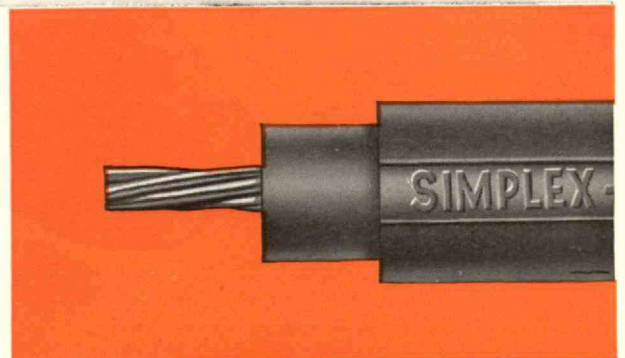
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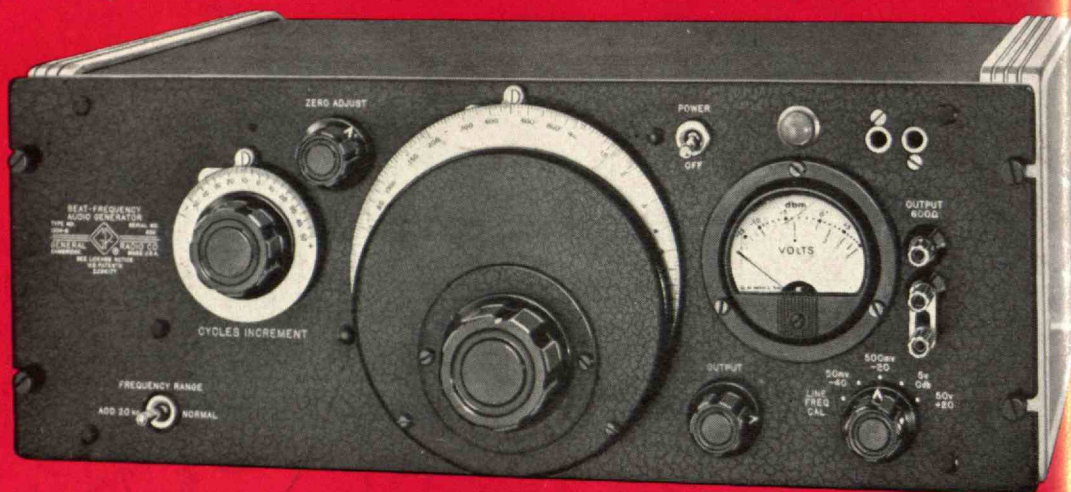
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